

50	55	60
Asn Ser Ser Thr Glu Ala	Asn Val Ile Lys Glu Ala	Leu Asp Ser Ser
65	70	75
Leu Glu Ser Thr Leu Asp	Asn Ser Cys Gln Gly Ala	Gln Met Asp Asn
85	90	95
Lys Ser Glu Val Gln Leu	Trp Leu Leu Lys Arg	Ile Gln Val Pro Ile
100	105	110
Glu Asp Ile Leu Pro Ser	Lys Glu Glu Lys Ser	Lys Thr Pro Pro Met
115	120	125
Phe Leu Cys Ile Lys Val	Gly Lys Pro Met Arg	Lys Ser Phe Ala Thr
130	135	140
His Thr Ala Ala Met Val	Gln Gln Tyr Gly Lys	Arg Arg Lys Gln Pro
145	150	155
Glu Tyr Trp Phe Ala Val	Pro Arg Glu Arg Val	Asp His Leu Tyr Thr
165	170	175
Phe Phe Val Gln Trp Ser	Pro Asp Val Tyr Gly	Lys Asp Ala Lys Glu
180	185	190
Gln Gly Phe Val Val Val	Glu Lys Glu Glu Leu	Asn Met Ile Asp Asn
195	200	205
Phe Phe Ser Glu Pro Thr	Thr Lys Ser Trp Glu	Ile Ile Thr Val Glu
210	215	220
Glu Ala Lys Arg Arg Lys	Ser Thr Cys Ser Tyr	Tyr Glu Asp Glu Asp
225	230	235
Glu Glu Val Leu Pro Val	Leu Arg Pro Pro Arg	Ala Phe Trp Glu Asn
245	250	255
Lys Pro Leu Asn Arg Trp	Ala Arg Pro Phe Pro	Ala Arg Val Gln Gly
260	265	270
Tyr Pro Trp Arg Leu Ala	Tyr Ser Thr Leu Glu	His Gly Thr Ser Leu
275	280	285
Lys Thr Leu Tyr Arg Lys	Ser Ala Ser Leu Asp	Ser Pro Val Leu Leu
290	295	300
Val Ile Lys		
305		

&lt;210&gt; 2763

&lt;211&gt; 2210

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2763

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60

gttcttggtg gatcacaac aacctaattg acagtctatc gccaacatcc acaaacacag  
120

caaacagtcc agtcctgcag accacacagg gtacatctag agggttctac ttgcatcacc  
180

cacacttcca ctctgtgaa acaactgtct tgggcatgag aagggccagg ataggccagg  
240

tgaatggcag gctgccaac aacccaatc ccaaaccaac ctcccaggcc atgggcccac  
300

gtccctgcag gaagatgcta ataggtacaa caggtagaac atgtagacac aaacatctag  
360

tttatttttt ctgactgtaa ccaaagtcag caaaagaaac aacaaaactt cagtgcctta  
420

gaaatcctcc tggattcaat gacaacacat caatggccgg gcacaggggt ggattccttt  
480  
tatgaaatca ccttataatc tctcatcatc ccaggacagt gccttttggg actgcatgaa  
540  
tctttaatag ctacaccaca ttttctcatc ctttaagtta tgacagacag gttatctctc  
600  
tccaagagca tcaggttaga tgctctttca ctcttacaaa ctgtcagggt gagggagaat  
660  
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780  
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840  
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1140  
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1200  
tgaagccaaa ggcaatgatg acttttttat aaagaacaac aacactgaag tctgggtact  
1260  
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1320  
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1380  
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1440  
gctttgtttc ataatacgc ctgatataag gtttcaagat ccgagaggta taagggtga  
1500  
caatactctg gtccacagcc atatcttctg atcctaccaa gcgatacaaa aacttgggtg  
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1860  
gcttttcctc gtagatgtc acgggagtat acctgggctc tttcggcttt gtgtccttct  
1920  
ccagctgagg cttcctcttt tctctagccc ttgtttgcaa agatgtgttt gaatctgtgt  
1980  
cttcaactgc aatatccatc ctgtcgggtt tttcctcctc actctctacc tctgtctta  
2040



tctgttcagg gcctctgacc ttctttctgc cccaaccac tggcccagaa gctactgacc  
 2100  
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 2160  
 cgtcatcatg aaacaaggct tgtgggggca tcacatctgg aatcagatct  
 2210

<210> 2764  
 <211> 423  
 <212> PRT  
 <213> Homo sapiens

<400> 2764  
 Met Pro Pro Gln Ala Leu Phe His Asp Asp Asp Glu Met Glu Gly Asp  
 1 5 10 15  
 Gly Val Ile Asp Pro Gly Met Glu Tyr Val Pro Pro Pro Ala Gly Ser  
 20 25 30  
 Val Ala Ser Gly Pro Val Val Gly Arg Lys Lys Val Arg Gly Pro  
 35 40 45  
 Glu Gln Ile Lys Gln Glu Val Glu Ser Glu Glu Glu Lys Pro Asp Arg  
 50 55 60  
 Met Asp Ile Asp Ser Glu Asp Thr Asp Ser Asn Thr Ser Leu Gln Thr  
 65 70 75 80  
 Arg Ala Arg Glu Lys Arg Lys Pro Gln Leu Glu Lys Asp Thr Lys Pro  
 85 90 95  
 Lys Glu Pro Arg Tyr Thr Pro Val Ser Ile Tyr Glu Glu Lys Leu Leu  
 100 105 110  
 Leu Lys Arg Leu Glu Ala Cys Pro Gly Ala Val Ala Met Thr Pro Glu  
 115 120 125  
 Ala Arg Arg Leu Lys Arg Lys Leu Ile Val Arg Gln Ala Lys Arg Asp  
 130 135 140  
 Arg Gly Leu Pro Leu Phe Asp Leu Asp Gln Val Val Asn Ala Ala Leu  
 145 150 155 160  
 Leu Leu Val Asp Gly Ile Tyr Gly Ala Lys Glu Gly Gly Ile Ser Arg  
 165 170 175  
 Leu Pro Ala Gly Gln Ala Thr Tyr Arg Thr Thr Cys Gln Asp Phe Arg  
 180 185 190  
 Ile Leu Asp Arg Tyr Gln Thr Ser Leu Pro Ser Arg Lys Gly Phe Arg  
 195 200 205  
 His Gln Thr Thr Lys Phe Leu Tyr Arg Leu Val Gly Ser Glu Asp Met  
 210 215 220  
 Ala Val Asp Gln Ser Ile Val Ser Pro Tyr Thr Ser Arg Ile Leu Lys  
 225 230 235 240  
 Pro Tyr Ile Arg Arg Asp Tyr Glu Thr Lys Pro Pro Lys Leu Gln Leu  
 245 250 255  
 Leu Ser Gln Ile Arg Ser His Leu His Arg Ser Asp Pro His Trp Thr  
 260 265 270  
 Pro Glu Pro Asp Ala Pro Leu Asp Tyr Cys Tyr Val Arg Pro Asn His  
 275 280 285  
 Ile Pro Thr Ile Asn Ser Met Cys Gln Glu Phe Phe Trp Pro Gly Ile  
 290 295 300  
 Asp Leu Ser Glu Cys Leu Gln Tyr Pro Asp Phe Ser Val Val Val Leu  
 305 310 315 320  
 Tyr Lys Lys Val Ile Ile Ala Phe Gly Phe Met Val Pro Asp Val Lys

```

                325                330                335
Tyr Asn Glu Ala Tyr Ile Ser Phe Leu Phe Val His Pro Glu Trp Arg
                340                345                350
Arg Ala Gly Ile Ala Thr Phe Met Ile Tyr His Leu Ile Gln Thr Cys
                355                360                365
Met Gly Lys Asp Val Thr Leu His Val Ser Ala Ser Asn Pro Ala Met
                370                375                380
Leu Leu Tyr Gln Lys Phe Gly Phe Lys Thr Glu Glu Tyr Val Leu Asp
385                390                395                400
Phe Tyr Asp Lys Tyr Tyr Pro Leu Glu Ser Thr Glu Cys Lys His Ala
                405                410                415
Phe Phe Leu Arg Leu Arg Arg
                420

```

&lt;210&gt; 2765

&lt;211&gt; 582

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2765

```

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ttgttcatcc cactggtgct cggctgctgg ctggcccaca aacatgttct catagtcggg
120
agtggagggg caggatggca cggccacttg gggcttgggg gcgctccggc tgccgtaccg
180
tggctgcaag cctaaaccgg gcttggggccc atcctgagca gcccaggggt tggttcagctc
240
ccggcttctg gccactcggc atcgccagag tctccaggcc agcacagggc cagcgatggc
300
aagtccaaga agcaggcacc cgctgaccac cactgccccg atagttgcag aggccaggcc
360
aggggcgag ctgacctcca ggaaggcaga gaggttgtgc tgggagctgg ttgtgtccca
420
gcagagcaga ggcttctggc cagagcagtt gtctcggcgg atgtcgtgcc aggactccag
480
ggcacagtgt cagtcggcct gcaggtcaag gtcacagcgg gcggccagcg ccccatccac
540
acgagacaag gggttgcgta gcacgttcag gacctcaagc tt
582

```

&lt;210&gt; 2766

&lt;211&gt; 100

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2766

```

Met Gly Arg Trp Pro Pro Ala Val Thr Leu Thr Cys Arg Pro Thr Ala
1                5                10                15
Thr Val Pro Trp Ser Pro Gly Thr Thr Ser Ala Glu Thr Thr Ala Leu
                20                25                30
Ala Arg Ser Leu Cys Ser Ala Gly Thr Gln Pro Ala Pro Ser Thr Thr
                35                40                45
Ser Leu Pro Ser Trp Arg Ser Ala Ala Pro Leu Ala Trp Pro Leu Gln

```

50		55		60	
Leu Ser Gly Gln Trp	Trp Ser Ala Gly Ala Cys	Phe Leu Asp Leu Pro			
65	70	75	80		
Ser Leu Ala Leu Cys Trp	Pro Gly Asp Ser Gly	Asp Ala Glu Trp	Pro		
	85	90	95		
Glu Ala Gly Ser					
	100				

&lt;210&gt; 2767

&lt;211&gt; 1202

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2767

```

gaattcctca ttgataactg ctttgaaata tttggggaga acattccagt gcattccagt
60
atcacttctg atgactccct ggagcacact gacagttcag atgtgtcgac cctgcagaat
120
gactcagcct acgacagcaa cgaccctgat gtggaatcca acagcagcag tggcatcagc
180
tctcccagca ggcagcccca ggtgcccatg gccacagctg ctggcttggg tagcgcgggc
240
ccacaggatg cccgagaggt cagcccagag ccattgtga gcaccgtggc caggctgaaa
300
agctccctcg cacagcccga taggagatac tcagagccca gcatgccatc ctcccaggag
360
tgcctcgaga gccgggtgac aaaccaaaca ctaacaaaga gtgaagggga cttccccgtg
420
ccccgggtag gctctcgttt ggaaagttag gaggtgaag acccatttcc agaggaggtc
480
ttccctgcag tgcaaggcaa aaccaagagg ccggtggacc tgaagatcaa gaacttggcc
540
ccgggttcgg tgctcccgcg ggcactggtt ctcaaagcct tctccagcag ctcgctggac
600
gcgtcctctg acagctcgcc cgtggcttct cttccagtc ccaaaagaaa tttcttcagc
660
agacatcagt ctttcaccac aaagacagag aaaggcaagc ccagccgaga aattaaag
720
cactccatgt ctttcacctt tgcccctcac aaaaaagtgc tgaccaaaaa cctcagcgcg
780
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840
agccagcttg ccggccgaat cgtgcaggaa aatgggtgtg aaaccacaa ccaaacagcc
900
cgcggttctt gctgagacc ccacgcctc tcggtggatg atgtgttcca gggagctgac
960
tgggagaggc ctggaagccc accctcttat gaagaggcca tgcagggccc ggcagccaga
1020
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1080
acgggggggag aagtgggggag gcagagtgtg aagggaata aaaccaatta gtaattttta
1140
actatcaaat gcactccagc aatcagtcaa aacaggcccc aggaaacctg ttccaactta
1200

```

ag

1202

&lt;210&gt; 2768

&lt;211&gt; 282

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2768

```

Met Ala Thr Ala Ala Gly Leu Asp Ser Ala Gly Pro Gln Asp Ala Arg
 1           5           10           15
Glu Val Ser Pro Glu Pro Ile Val Ser Thr Val Ala Arg Leu Lys Ser
      20           25           30
Ser Leu Ala Gln Pro Asp Arg Arg Tyr Ser Glu Pro Ser Met Pro Ser
      35           40           45
Ser Gln Glu Cys Leu Glu Ser Arg Val Thr Asn Gln Thr Leu Thr Lys
      50           55           60
Ser Glu Gly Asp Phe Pro Val Pro Arg Val Gly Ser Arg Leu Glu Ser
      65           70           75           80
Glu Glu Ala Glu Asp Pro Phe Pro Glu Glu Val Phe Pro Ala Val Gln
      85           90           95
Gly Lys Thr Lys Arg Pro Val Asp Leu Lys Ile Lys Asn Leu Ala Pro
      100          105          110
Gly Ser Val Leu Pro Arg Ala Leu Val Leu Lys Ala Phe Ser Ser Ser
      115          120          125
Ser Leu Asp Ala Ser Ser Asp Ser Ser Pro Val Ala Ser Pro Ser Ser
      130          135          140
Pro Lys Arg Asn Phe Phe Ser Arg His Gln Ser Phe Thr Thr Lys Thr
      145          150          155          160
Glu Lys Gly Lys Pro Ser Arg Glu Ile Lys Lys His Ser Met Ser Phe
      165          170          175
Thr Phe Ala Pro His Lys Lys Val Leu Thr Lys Asn Leu Ser Ala Gly
      180          185          190
Ser Gly Lys Ser Gln Asp Phe Thr Arg Asp His Val Pro Arg Gly Val
      195          200          205
Arg Lys Glu Ser Gln Leu Ala Gly Arg Ile Val Gln Glu Asn Gly Cys
      210          215          220
Glu Thr His Asn Gln Thr Ala Arg Gly Phe Cys Leu Arg Pro His Ala
      225          230          235          240
Leu Ser Val Asp Asp Val Phe Gln Gly Ala Asp Trp Glu Arg Pro Gly
      245          250          255
Ser Pro Pro Ser Tyr Glu Glu Ala Met Gln Gly Pro Ala Ala Arg Leu
      260          265          270
Val Ala Ser Gln Gln Phe Gln Phe Leu Ala
      275          280

```

&lt;210&gt; 2769

&lt;211&gt; 1286

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2769

```

atctgcaaca tgtacaccat gtacagcatg atgaacgtcg gccagacagc cgagaaggtg
60

```

gaggccctcc cggagcaggt agcccccag tcccgaatc gcatccgggt tcggcaagac  
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 ctggcgctctc tcccggctga acttatcaac cagattggga accgctgcca cccaagctc  
 180  
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 240  
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 300  
 cggcggctcc tggcctcctt ctttgaccgg aacacgctgg ccaacagctg cggcaccggc  
 360  
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 420  
 gtcaagtact actgccagaa cttcgcccc aacttcaagg agagcgagat gaatgccatc  
 480  
 gcggccgaca tgtgcaccaa cgcgcgcgc gtcgtgcgca agagctggat gccaaggtc  
 540  
 aaggtgctca aggctgagga tgacgcctac accaccttca tcagtgaac gggcaagatc  
 600  
 gagccggaca tgatgggtgt ggagcatggc ttcgagaccg ccagccacga gggcgaggcg  
 660  
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 720  
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 1080  
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 1200  
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 1260  
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 1286

&lt;210&gt; 2770

&lt;211&gt; 228

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2770

Ile	Cys	Asn	Met	Tyr	Thr	Met	Tyr	Ser	Met	Met	Asn	Val	Gly	Gln	Thr
1			5					10						15	
Ala	Glu	Lys	Val	Glu	Ala	Leu	Pro	Glu	Gln	Val	Ala	Pro	Glu	Ser	Arg
		20						25				30			
Asn	Arg	Ile	Arg	Val	Arg	Gln	Asp	Leu	Ala	Ser	Leu	Pro	Ala	Glu	Leu



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 accaaaagaa acgaattcca ttttaacatt tattcattca ccttcacctg gtggtgatcc  
 780  
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 840  
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 900  
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 1620  
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 1668

&lt;210&gt; 2772

&lt;211&gt; 258

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2772

Val	Ile	Cys	Met	Trp	Gln	Gly	Cys	Ala	Val	Glu	Arg	Pro	Val	Gly	Arg
1			5						10					15	
Met	Thr	Ser	Gln	Thr	Pro	Leu	Pro	Gln	Ser	Pro	Arg	Pro	Arg	Arg	Pro
		20						25					30		
Thr	Met	Ser	Thr	Val	Val	Glu	Leu	Asn	Val	Gly	Gly	Glu	Phe	His	Thr
	35					40						45			
Thr	Thr	Leu	Gly	Thr	Leu	Arg	Lys	Phe	Pro	Gly	Ser	Lys	Leu	Ala	Glu
	50				55						60				
Met	Phe	Ser	Ser	Leu	Ala	Lys	Ala	Ser	Thr	Asp	Ala	Glu	Gly	Arg	Phe
65				70					75					80	
Phe	Ile	Asp	Arg	Pro	Ser	Thr	Tyr	Phe	Arg	Pro	Ile	Leu	Asp	Tyr	Leu
		85						90					95		
Arg	Thr	Gly	Gln	Val	Pro	Thr	Gln	His	Ile	Pro	Glu	Val	Tyr	Arg	Glu

```

      100      105      110
Ala Gln Phe Tyr Glu Ile Lys Pro Leu Val Lys Leu Leu Glu Asp Met
      115      120      125
Pro Gln Ile Phe Gly Glu Gln Val Ser Arg Lys Gln Phe Leu Leu Gln
      130      135      140
Val Pro Gly Tyr Ser Glu Asn Leu Glu Leu Met Val Arg Leu Ala Arg
145      150      155      160
Ala Glu Ala Ile Thr Ala Arg Lys Ser Ser Val Leu Val Cys Leu Val
      165      170      175
Glu Thr Glu Glu Gln Asp Ala Tyr Tyr Ser Glu Val Leu Cys Phe Leu
      180      185      190
Gln Asp Lys Lys Met Phe Lys Ser Val Val Lys Phe Gly Pro Trp Lys
      195      200      205
Ala Val Leu Asp Asn Ser Asp Leu Met His Cys Leu Glu Met Asp Ile
      210      215      220
Lys Ala Gln Gly Tyr Lys Val Phe Ser Lys Phe Tyr Leu Thr Tyr Pro
225      230      235      240
Thr Lys Arg Asn Glu Phe His Phe Asn Ile Tyr Ser Phe Thr Phe Thr
      245      250      255
Trp Trp

```

&lt;210&gt; 2773

&lt;211&gt; 593

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2773

```

nacagtcaga caggggaatga tgaagaggct ttcgactttt ttgaggagca agaccaagtg
60
gcagaagagg gtccgcccgt ccagagcctg aagggcgagg atgctgagga atccttgagg
120
gaggaggagg cgctggaccc tctgggcatt atgcgctcca agaagcccaa gaaacatccc
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300
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480
gattagcttc ttgagagcag gaaccacatt cattctttgt gtctgccctg tgactatcca
540
gggagtagtt ggacttcctc ataataaaga atgttctgat agccaaaaaa aaa
593

```

&lt;210&gt; 2774

&lt;211&gt; 157

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens



&lt;400&gt; 2774

Xaa Ser Gln Thr Gly Asn Asp Glu Glu Ala Phe Asp Phe Phe Glu Glu  
 1 5 10 15  
 Gln Asp Gln Val Ala Glu Glu Gly Pro Val Gln Ser Leu Lys Gly  
 20 25 30  
 Glu Asp Ala Glu Glu Ser Leu Glu Glu Glu Ala Leu Asp Pro Leu  
 35 40 45  
 Gly Ile Met Arg Ser Lys Lys Pro Lys Lys His Pro Lys Val Ala Val  
 50 55 60  
 Lys Ala Lys Pro Ser Pro Arg Leu Thr Ile Phe Asp Glu Glu Val Asp  
 65 70 75 80  
 Pro Asp Glu Gly Leu Phe Gly Pro Gly Arg Lys Leu Ser Pro Gln Asp  
 85 90 95  
 Pro Ser Glu Asp Val Ser Ser Met Asp Pro Leu Lys Leu Phe Asp Asp  
 100 105 110  
 Pro Asp Leu Gly Gly Ala Ile Pro Leu Gly Asp Ser Leu Leu Leu Pro  
 115 120 125  
 Ala Ala Cys Glu Ser Gly Gly Pro Thr Pro Ser Leu Ser His Arg Asp  
 130 135 140  
 Ala Ser Lys Glu Leu Phe Arg Gln Ile Gln Lys Glu Pro  
 145 150 155

&lt;210&gt; 2775

&lt;211&gt; 3139

&lt;212&gt; DNA

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&lt;211&gt; 1146

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&lt;213&gt; Homo sapiens

&lt;400&gt; 2778

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&lt;211&gt; 1268

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&lt;213&gt; Homo sapiens

&lt;400&gt; 2781

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 780  
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 840  
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 960  
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 1020  
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 1080  
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 1140  
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 1200  
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 1260  
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 1320

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 1380  
 caccagcaga gctaagactg gagtctcctg tggcctaact ttcaatgagg gaaccggatg  
 1440  
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 1620  
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 1740  
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 1800  
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 1920  
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 1980  
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 2100  
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 2160  
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 2220  
 aacaggattt tgcttaaaat acttgttact tgtcccaaat caaaatattc caaaatctta  
 2280  
 gaatacttaa gtcttttagt acgtgttttt ttcccttggt caaataatct gaaaatattt  
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 2376

<210> 2784

<211> 361

<212> PRT

<213> Homo sapiens

<400> 2784

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Glu	Val	Leu	Gly	Ile	Lys	Arg	Asp	Lys	Ser	Asp	Ser	Pro	Ala	Ile	Gln
			20					25					30		
Leu	Arg	Leu	Lys	Glu	Pro	Met	Asp	Val	Asp	Val	Glu	Asp	Tyr	Tyr	Pro
			35				40					45			
Ala	Phe	Leu	Asp	Met	Val	Arg	Ser	Leu	Leu	Asp	Gly	Asn	Ile	Asp	Ser
			50			55					60				
Ser	Gln	Tyr	Glu	Asp	Ser	Leu	Arg	Glu	Met	Phe	Thr	Ile	His	Ala	Tyr
65					70				75					80	
Ile	Ala	Phe	Thr	Met	Asp	Lys	Leu	Ile	Gln	Ser	Ile	Val	Arg	Gln	Leu

				85				90				95			
Gln	His	Ile	Val	Ser	Asp	Glu	Ile	Cys	Val	Gln	Val	Thr	Asp	Leu	Tyr
			100					105					110		
Leu	Ala	Glu	Asn	Asn	Asn	Gly	Ala	Thr	Gly	Gly	Gln	Leu	Asn	Thr	Gln
			115				120					125			
Asn	Ser	Arg	Ser	Leu	Leu	Glu	Ser	Thr	Tyr	Gln	Arg	Lys	Ala	Glu	Gln
			130				135					140			
Leu	Met	Ser	Asp	Glu	Asn	Cys	Phe	Lys	Leu	Met	Phe	Ile	Gln	Ser	Gln
145						150				155					160
Gly	Gln	Val	Gln	Leu	Thr	Ile	Glu	Leu	Leu	Asp	Thr	Glu	Glu	Glu	Asn
				165					170						175
Ser	Asp	Asp	Pro	Val	Glu	Ala	Glu	Arg	Trp	Ser	Asp	Tyr	Val	Glu	Arg
			180					185					190		
Tyr	Met	Asn	Ser	Asp	Thr	Thr	Ser	Pro	Glu	Leu	Arg	Glu	His	Leu	Ala
			195				200					205			
Gln	Lys	Pro	Val	Phe	Leu	Pro	Arg	Asn	Leu	Arg	Arg	Ile	Arg	Lys	Cys
						215					220				
Gln	Arg	Gly	Arg	Glu	Gln	Gln	Glu	Lys	Glu	Gly	Lys	Glu	Gly	Asn	Ser
225						230				235					240
Lys	Lys	Thr	Met	Glu	Asn	Val	Asp	Ser	Leu	Asp	Lys	Leu	Glu	Cys	Arg
				245					250					255	
Phe	Lys	Leu	Asn	Ser	Tyr	Lys	Met	Val	Tyr	Val	Ile	Lys	Ser	Glu	Asp
			260					265					270		
Tyr	Met	Tyr	Arg	Arg	Thr	Ala	Leu	Leu	Arg	Ala	His	Gln	Ser	His	Glu
			275				280					285			
Arg	Val	Ser	Lys	Arg	Leu	His	Gln	Arg	Phe	Gln	Ala	Trp	Val	Asp	Lys
			290				295				300				
Trp	Thr	Lys	Glu	His	Val	Pro	Arg	Glu	Met	Ala	Ala	Glu	Thr	Ser	Lys
305					310					315					320
Trp	Leu	Met	Gly	Glu	Gly	Leu	Glu	Gly	Leu	Val	Pro	Cys	Thr	Thr	Thr
				325					330					335	
Cys	Asp	Thr	Glu	Thr	Leu	His	Phe	Val	Ser	Ile	Asn	Lys	Tyr	Arg	Val
			340					345					350		
Lys	Tyr	Gly	Thr	Val	Phe	Lys	Ala	Pro							
			355				360								

<210> 2785

<211> 492

<212> DNA

<213> Homo sapiens

<400> 2785

gcgcgcggttc ggaccgcgcg ggcacatggc cagctccgga gaggacatat ccaatgatga  
60

tgatgacatg caccctgcag cagccgggat ggcagacggg gtccacctcc tagggttctc  
120

tgatgagatc ctccttcaca tcttgagtca cgtccccagc acagatctga ttctgaacgt  
180

ccggcggtacc tgtcggaagc ttgcagccct gtgccttgac aagagcctca tccacaccgt  
240

gttgctgcaa aaggactatc aggcgagcga ggacaaagtg aggcagctgg tgaaggagat  
300

cgcccgaggag atccagcagc tgagcatggc tggctgctac tggctgctg gctccaccgt  
360

ggaacacgtg gcccgctgcc cgcagcctgg tgaaggtgaa cctctcgggc tgccacctca  
 420  
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 480  
 acgtgagccc cg  
 492

<210> 2786  
 <211> 155  
 <212> PRT  
 <213> Homo sapiens

<400> 2786  
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 Pro Ala Ala Ala Gly Met Ala Asp Gly Val His Leu Leu Gly Phe Ser  
 20 25 30  
 Asp Glu Ile Leu Leu His Ile Leu Ser His Val Pro Ser Thr Asp Leu  
 35 40 45  
 Ile Leu Asn Val Arg Arg Thr Cys Arg Lys Leu Ala Ala Leu Cys Leu  
 50 55 60  
 Asp Lys Ser Leu Ile His Thr Val Leu Leu Gln Lys Asp Tyr Gln Ala  
 65 70 75 80  
 Ser Glu Asp Lys Val Arg Gln Leu Val Lys Glu Ile Gly Arg Glu Ile  
 85 90 95  
 Gln Gln Leu Ser Met Ala Gly Cys Tyr Trp Leu Pro Gly Ser Thr Val  
 100 105 110  
 Glu His Val Ala Arg Cys Pro Gln Pro Gly Glu Gly Glu Pro Leu Gly  
 115 120 125  
 Leu Pro Pro His Phe Pro Ala Pro Leu Gln Asp Ala Leu Gly Pro Ala  
 130 135 140  
 Ala Pro Ala Leu Ala Gly His Arg Arg Glu Pro  
 145 150 155

<210> 2787  
 <211> 299  
 <212> DNA  
 <213> Homo sapiens

<400> 2787  
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 atgtggggag aagagccgta ctctgacata tcagttgcta aaacacgtgc agggcatgcc  
 120  
 acaatgcaca gacatggcag tacccttctg gtgggaggga gtcaccattt gctctgcctt  
 180  
 gccctctgct gggtgctctt acaggtgcta ctgcatccag cgcttgaaac aattctgtgg  
 240  
 ggtattgatt ctgaagagat cactgatggc cgtgatttct tgcctcagct taccagat  
 299

<210> 2788  
 <211> 95  
 <212> PRT

<213> Homo sapiens

<400> 2788

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Met Thr Arg Asp Ser Gly Met Lys Gln Lys His Ala Ala Ser Thr Ser
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Met Trp Gly Glu Glu Pro Tyr Ser Asp Ile Ser Val Ala Lys Thr Arg
             20             25             30
Ala Gly His Ala Thr Met His Arg His Gly Ser Ile Leu Leu Val Gly
             35             40             45
Gly Ser His His Leu Leu Cys Pro Ala Leu Cys Trp Val Leu Leu Gln
 50             55             60
Val Leu Leu His Pro Ala Leu Glu Thr Ile Leu Trp Gly Ile Asp Ser
65             70             75             80
Glu Glu Ile Thr Asp Gly Arg Asp Phe Leu Pro Gln Leu Thr Gln
             85             90             95

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<210> 2789

<211> 492

<212> DNA

<213> Homo sapiens

<400> 2789

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nggaccccag ctgctccttt ttgaaggaaa tctgctcgct cagggagtcg atgcggccga
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gctgctggaa ggagtgcacc aggaggctgc cgggggtccgg gagcccatgc tccagtgcct
120
gcgaggccag gctgtgcagt ggggccagca ccagctgcag cttctcctcc agcaggtcca
180
ccctggactg cagcctctgc acttcttctt tcattgcact gtccactcct gcgggcagag
240
ccaggcgctg ggtcacggcc ggccggctcc ccacccacac ccccagggtc ccctcctgtc
300
cccagggaga ggcagagcca gaagactcag gcccaggcct ctgccacccc cgctgcctgc
360
ctggcgctgg ccagaggtct caggctatgc cgcctaagta cgtcggggcg ggtggctctg
420
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480
tcgttccgaa tt
492

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<210> 2790

<211> 141

<212> PRT

<213> Homo sapiens

<400> 2790

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Arg Lys Ser Ala Arg Ser Gly Ser Arg Cys Gly Arg Ala Ala Gly Arg
 1             5             10             15
Ser Ala Pro Gly Gly Cys Arg Gly Pro Gly Ala His Ala Pro Val Pro
             20             25             30
Ala Arg Pro Gly Cys Ala Val Gly Pro Ala Pro Ala Ala Ala Ser Pro
             35             40             45
Pro Ala Gly Pro Pro Trp Thr Ala Ala Ser Ala Leu Leu Pro Ser Leu

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50	55	60
His Cys Pro Leu Leu Arg Ala Glu Pro Gly Ala Gly Ser Arg Pro Ala		
65	70	75
Gly Ser Pro Pro Thr Pro Pro Gly Leu Pro Pro Val Pro Arg Glu Arg		80
	85	90
Gln Ser Gln Lys Thr Gln Ala Gln Ala Ser Ala Thr Pro Ala Ala Cys		95
	100	105
Leu Ala Leu Ala Arg Gly Leu Arg Leu Cys Arg Leu Ser Thr Ser Gly		110
	115	120
Arg Val Ala Leu Arg Arg Gly Ser Gly Ser Arg Pro Arg		125
	130	135
		140

&lt;210&gt; 2791

&lt;211&gt; 1271

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2791

```

nntgtacagg ggatgcagaa tcaatgaaag agataaacia acatcagagt actgtcagac
60
atagaggact ggataatata tttgtgtctt tctacatagt ggtatagaaa tatcagggtcc
120
ccaaattccc atttttcttc caatcacatt taaaatttca atatgttgca ggcagtatgt
180
gtaagattat atccaaatat ttactcctgg ttgctcctct tgggcaagct gtgaatatga
240
tcaaaatatt taaagaagga agaaggtaaa gatctaaaat atgacatgaa aatacccaga
300
gaagtgtgcc taaattagca ttagggtttg agggatccta aggatgacaa aaagggactc
360
ttctattgaa ttcggtggtg atgctcagcg atagtaacaa tcttgctctc cctaacatct
420
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480
ggtgtggcca gaagaccctt ttccctatag accactatga gccctgaaag atttatgagg
540
taatgttcac ttcactcctgt gcttcttttc ctagatgtga actatgaaga ctttactttc
600
accataccag atgtagagga ctcaagtcag agaccagatc agggacccca gagacctcct
660
cctgaaggac tcctacctag accccctggg gatagtggta accaagatga tggtcctcag
720
cagagaccac caaaaccagg aggccatcac cgccatcctc cccacctcc ttttcaaaat
780
cagcaacgac caccccaacg aggacaccgt caactctctc taccctgatt tccttctgtc
840
agcctgcagg aagcatcatc attcttccgg agggacagac cagcaagaca tccccaggag
900
caaccactct ggtaatctag aattcagtgg cagaaaataa ataagaagat aacttccttc
960
agaaagccat gacattgaaa taatgtggtc ataactcttt cttcagtata ccaataaaat
1020
attaatagca tgcggaagaa agaatggttt gcattccacat ggagagtgtg ccatttagag
1080

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gtaacagggg gaggagaggg tgtgccatca agaggcaaca tggaggtggt tcaaacctat  
 1140  
 gcatcttggt ataaatatat ctttgctcac atgaatttta cttgttaatt agcctggctg  
 1200  
 ggggtgaatgg taacaggaga gaaatggaag agaatagggg gcaactgcgcc agcattaaca  
 1260  
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 1271

<210> 2792

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2792

Cys	Ser	Leu	His	Pro	Val	Leu	Leu	Phe	Leu	Asp	Val	Asn	Tyr	Glu	Asp
1				5				10						15	
Phe	Thr	Phe	Thr	Ile	Pro	Asp	Val	Glu	Asp	Ser	Ser	Gln	Arg	Pro	Asp
			20					25					30		
Gln	Gly	Pro	Gln	Arg	Pro	Pro	Pro	Glu	Gly	Leu	Leu	Pro	Arg	Pro	Pro
		35					40					45			
Gly	Asp	Ser	Gly	Asn	Gln	Asp	Gly	Pro	Gln	Gln	Arg	Pro	Pro	Lys	
	50					55					60				
Pro	Gly	Gly	His	His	Arg	His	Pro	Pro	Pro	Pro	Phe	Gln	Asn	Gln	
65					70					75				80	
Gln	Arg	Pro	Pro	Gln	Arg	Gly	His	Arg	Gln	Leu	Ser	Leu	Pro	Arg	Phe
				85					90					95	
Pro	Ser	Val	Ser	Leu	Gln	Glu	Ala	Ser	Ser	Phe	Phe	Arg	Arg	Asp	Arg
			100					105						110	
Pro	Ala	Arg	His	Pro	Gln	Glu	Gln	Pro	Leu	Trp					
			115				120								

<210> 2793

<211> 847

<212> DNA

<213> Homo sapiens

<400> 2793

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 120  
 tgaggcggcg gcgtcactgc caggaaacaa cccaacagt cagcgcgccg gcggccgcgg  
 180  
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 240  
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 300  
 attcagtata ttaatgtctt attgataatg gcagaacatc caccactact ggatacaact  
 360  
 cagatcttaa gtagtgatat ttctcttttg tctgcccta ttgtaagtgc agatggaaca  
 420  
 caacaggtta ttctgttaca agttaacca ggagaagcat ttacaataag aagagaagat  
 480



ggacagtttc agtgcattac aggtcctgct caggttccaa tgatgtcccc aaatggttct  
 540  
 gtgcctccta tctatgtgcc tcctggatat gccccacagg ttattgaaga caatgggtgt  
 600  
 cgaagagttg tcgtggtecc tcaggcacca gagtttcacc ctggtagtca cacagttctc  
 660  
 caccgttctc cacatcctcc tctacctggt ttcattcctg tcccaactat gatgccgcct  
 720  
 caccacgtca tatgtactca cccgtgactg gagctggaga catgacaaca cagtatatgc  
 780  
 cncagtatca gtcttcacaa gtctatggag atgtagatgc tcactctaca catggccctt  
 840  
 cacgcgt  
 847

<210> 2794

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2794

Met	Ala	Glu	His	Pro	Pro	Leu	Leu	Asp	Thr	Thr	Gln	Ile	Leu	Ser	Ser
1				5				10					15		
Asp	Ile	Ser	Leu	Leu	Ser	Ala	Pro	Ile	Val	Ser	Ala	Asp	Gly	Thr	Gln
			20					25					30		
Gln	Val	Ile	Leu	Val	Gln	Val	Asn	Pro	Gly	Glu	Ala	Phe	Thr	Ile	Arg
			35				40					45			
Arg	Glu	Asp	Gly	Gln	Phe	Gln	Cys	Ile	Thr	Gly	Pro	Ala	Gln	Val	Pro
			50				55				60				
Met	Met	Ser	Pro	Asn	Gly	Ser	Val	Pro	Pro	Ile	Tyr	Val	Pro	Pro	Gly
65					70					75				80	
Tyr	Ala	Pro	Gln	Val	Ile	Glu	Asp	Asn	Gly	Val	Arg	Arg	Val	Val	Val
				85					90					95	
Val	Pro	Gln	Ala	Pro	Glu	Phe	His	Pro	Gly	Ser	His	Thr	Val	Leu	His
			100					105					110		
Arg	Ser	Pro	His	Pro	Pro	Leu	Pro	Gly	Phe	Ile	Pro	Val	Pro	Thr	Met
		115				120					125				
Met	Pro	Pro	His	His	Val	Ile	Cys	Thr	His	Pro					
		130				135									

<210> 2795

<211> 1022

<212> DNA

<213> Homo sapiens

<400> 2795

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 ccaatgacca ccagcaccac gaagagcgtg ccgtagtcgc tgcgcacctg gctggcccgc  
 120  
 gcctggcagc tgctggttgt ggaatagttc tggatgccaa tctcctccag gtcctgcgg  
 180  
 atgtcaccca gcatggaaag gacatcttga gtgggcacca cccctgctc gccaccagt  
 240

gtcattgagaa ggtgctgctc cttctcgctg ggcttgctca gagagatgtg ccaggcccca  
 300  
 tggtagggcac tgccatggcg gggcagcacc tcttccacca gggccaggag ctgtggcccc  
 360  
 cggtagctgcc ggaacacctc acagtctatg ttctctgtca tgttcagaat gatgtagttt  
 420  
 ttcccagcca gattgctcca gtccttgtag atcacctgcg tagaatccca gggtagcctg  
 480  
 gattgagctt cagctgcctg cccttctagg agctgctggg tgagatcttc ttgtcccaag  
 540  
 gtagcagagg aagggtgtcag ttccatgtct ccaggggcca gtggggaaga ggctgaggtt  
 600  
 ctagagccaa ggggatcttc atctgggtgc tcggcccccac tgggagctgt ggtttgaggg  
 660  
 aatgaaggca aggccggcac ctctctgtgc tggccagaca aaccagctgc tcctgcagtg  
 720  
 gcttctctgc ttgcttctg aggagcctcg aactctaccc caagccctgc agctggcagc  
 780  
 actgtggcct ctgcctcttg gctgggtggag tcttggtccc ccgaggtcac ttagttggg  
 840  
 gtgactgaag gcagcagcaa gctgggcccc atgctgctct ccacctcatc aggtgagnna  
 900  
 gaaaagtcac ggacctgagg cttggcttct tcttgggac cattcacagg gagcagctcc  
 960  
 tcttcttctt cctctctctg tttctctacc tcttcttctt cctctctctc ccttctcagc  
 1020  
 gt  
 1022

<210> 2796

<211> 56

<212> PRT

<213> Homo sapiens

<400> 2796

Ala	Ser	Ala	Ala	Cys	Pro	Ser	Arg	Ser	Cys	Trp	Leu	Arg	Ser	Ser	Cys
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Pro	Lys	Val	Ala	Glu	Glu	Gly	Val	Ser	Ser	Met	Ser	Pro	Gly	Ala	Ser
			20					25					30		
Gly	Glu	Glu	Ala	Glu	Val	Leu	Glu	Pro	Arg	Gly	Ser	Ser	Ser	Gly	Cys
			35				40					45			
Ser	Ala	Pro	Leu	Gly	Ala	Val	Val								
			50				55								

<210> 2797

<211> 475

<212> DNA

<213> Homo sapiens

<400> 2797

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 gccctctca tcagcacctg catctgccc aatgtggagg ccgtgagcaa catccacaac  
 120

ctgaactcca tcagcgagtc cccgcatgag cgcatgcacc cctacatcga gctggcctgg  
 180  
 ggcttctcca cegtgttgg catcctactc ttcttgccg aggtggtgct gctctgctgg  
 240  
 atcaagttcc tccccgtgga tgcccggcgc cagcctggcc cccacctgg ccctgggagt  
 300  
 cacacgggct ggcaggccgc cctggtgtcc accatcatca tggtgcccgt gggcctcatc  
 360  
 ttctgtgtct tcaccatcca cttctaccgc tccctggtgc gccacaaaac ggagcgccac  
 420  
 aaccgcgaga tcgaggagct ccacaagctc aaggtccagc tggacgggca tgagc  
 475

<210> 2798

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2798

Arg	Pro	Leu	Leu	Ile	Ala	Phe	Ser	Ala	Cys	Thr	Thr	Val	Leu	Val	Ala
1				5					10					15	
Val	His	Leu	Phe	Ala	Leu	Leu	Ile	Ser	Thr	Cys	Ile	Leu	Pro	Asn	Val
			20					25					30		
Glu	Ala	Val	Ser	Asn	Ile	His	Asn	Leu	Asn	Ser	Ile	Ser	Glu	Ser	Pro
		35					40					45			
His	Glu	Arg	Met	His	Pro	Tyr	Ile	Glu	Leu	Ala	Trp	Gly	Phe	Ser	Thr
	50					55					60				
Val	Leu	Gly	Ile	Leu	Leu	Phe	Leu	Ala	Glu	Val	Val	Leu	Leu	Cys	Trp
65				70					75					80	
Ile	Lys	Phe	Leu	Pro	Val	Asp	Ala	Arg	Arg	Gln	Pro	Gly	Pro	Pro	Pro
			85					90					95		
Gly	Pro	Gly	Ser	His	Thr	Gly	Trp	Gln	Ala	Ala	Leu	Val	Ser	Thr	Ile
		100					105					110			
Ile	Met	Val	Pro	Val	Gly	Leu	Ile	Phe	Val	Val	Phe	Thr	Ile	His	Phe
	115					120					125				
Tyr	Arg	Ser	Leu	Val	Arg	His	Lys	Thr	Glu	Arg	His	Asn	Arg	Glu	Ile
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<210> 2799

<211> 2872

<212> DNA

<213> Homo sapiens

<400> 2799

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 2700  
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 2760  
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<210> 2800

<211> 294

<212> PRT

<213> Homo sapiens

<400> 2800

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Thr	Phe	Met	Ala	Ser	Pro	Tyr	Lys	Pro	Glu	Ile	Ser	Arg	Glu	Gln	Ala
			20					25					30		
Ile	Ala	Leu	Leu	Lys	Asp	Gln	Glu	Pro	Gly	Ala	Phe	Ile	Ile	Arg	Asp
		35				40					45				
Ser	His	Ser	Phe	Arg	Gly	Ala	Tyr	Gly	Leu	Ala	Met	Lys	Val	Ser	Ser
	50				55					60					
Pro	Pro	Pro	Thr	Ile	Met	Gln	Gln	Asn	Lys	Lys	Gly	Asp	Met	Thr	His
65				70						75				80	
Glu	Leu	Val	Arg	His	Phe	Leu	Ile	Glu	Thr	Gly	Pro	Arg	Gly	Val	Lys
			85					90					95		
Leu	Lys	Gly	Cys	Pro	Asn	Glu	Pro	Asn	Phe	Gly	Ser	Leu	Ser	Ala	Leu

100							105					110				
Val	Tyr	Gln	His	Ser	Ile	Ile	Pro	Leu	Ala	Leu	Pro	Cys	Lys	Leu	Val	
115							120					125				
Ile	Pro	Asn	Arg	Asp	Pro	Thr	Asp	Glu	Ser	Lys	Asp	Ser	Ser	Gly	Pro	
130							135					140				
Ala	Asn	Ser	Thr	Ala	Asp	Leu	Leu	Lys	Gln	Gly	Ala	Ala	Cys	Asn	Val	
145							150					155				
Leu	Phe	Ile	Asn	Ser	Val	Asp	Met	Glu	Ser	Leu	Thr	Gly	Pro	Gln	Ala	
165							170					175				
Ile	Ser	Lys	Ala	Thr	Ser	Glu	Thr	Leu	Ala	Ala	Asp	Pro	Thr	Pro	Ala	
180							185					190				
Ala	Thr	Ile	Val	His	Phe	Lys	Val	Ser	Ala	Gln	Gly	Ile	Thr	Leu	Thr	
195							200					205				
Asp	Asn	Gln	Arg	Lys	Leu	Phe	Phe	Arg	Arg	His	Tyr	Pro	Leu	Asn	Thr	
210							215					220				
Val	Thr	Phe	Cys	Asp	Leu	Asp	Pro	Gln	Glu	Arg	Lys	Trp	Met	Lys	Thr	
225							230					235				
Glu	Gly	Gly	Ala	Pro	Ala	Lys	Leu	Phe	Gly	Phe	Val	Ala	Arg	Lys	Gln	
245							250					255				
Gly	Ser	Thr	Thr	Asp	Asn	Ala	Cys	His	Leu	Phe	Ala	Glu	Leu	Asp	Pro	
260							265					270				
Asn	Gln	Pro	Ala	Ser	Ala	Ile	Val	Asn	Phe	Val	Ser	Lys	Val	Met	Leu	
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290																

<210> 2801

<211> 549

<212> DNA

<213> Homo sapiens

<400> 2801

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240

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300

ctggcattaa cagtgctgga gacatgtgtg aagaactgtg gccacogctt ccacatcctt  
350

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420

ctccccacca ttgtacagga caaagtgctt gctctgatcc aggcattgggc tgatgccttt  
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549

<210> 2802

<211> 151  
 <212> PRT  
 <213> Homo sapiens

<400> 2802  
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 Asn Met Glu Ile Cys Asp Ile Ile Asn Glu Thr Glu Glu Gly Pro Lys  
 35 40 45  
 Asp Ala Ile Arg Ala Leu Lys Lys Arg Leu Asn Gly Asn Arg Asn Tyr  
 50 55 60  
 Arg Glu Val Met Leu Ala Leu Thr Val Leu Glu Thr Cys Val Lys Asn  
 65 70 75 80  
 Cys Gly His Arg Phe His Ile Leu Val Ala Asn Arg Asp Phe Ile Asp  
 85 90 95  
 Ser Val Leu Val Lys Ile Ile Ser Pro Lys Asn Asn Pro Pro Thr Ile  
 100 105 110  
 Val Gln Asp Lys Val Leu Ala Leu Ile Gln Ala Trp Ala Asp Ala Phe  
 115 120 125  
 Arg Ser Ser Pro Asp Leu Thr Gly Val Val His Ile Tyr Glu Glu Leu  
 130 135 140  
 Lys Arg Lys Gly Val Glu Phe  
 145 150

<210> 2803  
 <211> 459  
 <212> DNA  
 <213> Homo sapiens

<400> 2803  
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 120  
 ccgccagccg taggggtgtgt gctgtccggg ctcacgggga cctgtctcc gagtcgttcg  
 180  
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 300  
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 360  
 ggaagaagtg cagaggctgc agtccagggt ggacctgctg gaggagaagc tgcagctggt  
 420  
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 459

<210> 2804  
 <211> 153  
 <212> PRT  
 <213> Homo sapiens

&lt;400&gt; 2804

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Gly Arg His Arg Trp Pro Pro Pro Pro Gly Gly Ala Ala Pro Ala Pro
          20           25           30
Val Arg Gly Met Thr Asp Ser Pro Pro Ala Val Gly Cys Val Leu
          35           40           45
Ser Gly Leu Thr Gly Thr Leu Ser Pro Ser Arg Ser Cys Ser Val Cys
          50           55           60
Thr Ser Pro Ser Ser Pro Pro Ala Thr Gly Thr Gly Pro Ala Ala Pro
65           70           75           80
Thr Ala Ile Cys Gln Pro Pro Cys Arg Asn Gly Gly Ser Cys Val Gln
          85           90           95
Pro Gly Arg Cys Arg Cys Pro Ala Gly Trp Arg Gly Asp Thr Cys Gln
          100          105          110
Ser Asp Val Asp Xaa Cys Asn Glu Gly Arg Ser Ala Glu Ala Ala Val
          115          120          125
Gln Gly Gly Pro Ala Gly Gly Glu Ala Ala Ala Gly Thr Gly Pro Thr
          130          135          140
Ala Gln Pro Gly Leu Ala Gly Thr Gly
145           150

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&lt;210&gt; 2805

&lt;211&gt; 771

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2805

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120
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180
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240
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360
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480
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771

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<210> 2806  
 <211> 187  
 <212> PRT  
 <213> Homo sapiens

<400> 2806  
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 Lys Ile Glu Arg Ile Gln Asn Pro Asp Leu Trp Asn Ser Tyr Gln Ala  
 35 40 45  
 Lys Lys Lys Thr Met Asp Ala Lys Asn Gly Gln Thr Met Asn Glu Lys  
 50 55 60  
 Gln Leu Phe His Gly Thr Asp Ala Gly Ser Val Pro His Val Asn Arg  
 65 70 75 80  
 Asn Gly Phe Asn Arg Ser Tyr Ala Gly Lys Asn Ala Val Ala Tyr Gly  
 85 90 95  
 Lys Gly Thr Tyr Phe Ala Val Asn Ala Asn Tyr Ser Ala Asn Asp Thr  
 100 105 110  
 Tyr Ser Arg Pro Asp Ala Asn Gly Arg Lys His Val Tyr Tyr Val Arg  
 115 120 125  
 Val Leu Thr Gly Ile Tyr Thr His Gly Asn His Ser Leu Ile Val Pro  
 130 135 140  
 Pro Ser Lys Asn Pro Gln Asn Pro Thr Asp Leu Tyr Asp Thr Val Thr  
 145 150 155 160  
 Asp Asn Val His His Pro Ser Leu Phe Val Ala Phe Tyr Asp Tyr Gln  
 165 170 175  
 Ala Tyr Pro Glu Tyr Leu Ile Thr Phe Arg Lys  
 180 185

<210> 2807  
 <211> 1660  
 <212> DNA  
 <213> Homo sapiens

<400> 2807  
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 360  
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 420  
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 480

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 1660

&lt;210&gt; 2808

&lt;211&gt; 390

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2808

Met	Leu	Phe	Glu	Lys	Asp	Gly	Ser	Ser	Cys	Ile	Ser	Arg	Arg	Pro	Leu
1				5					10					15	
Glu	Leu	Ala	Gly	Cys	Ala	Ser	Cys	Leu	Thr	Val	Gln	Asp	Asn	Trp	Thr
			20					25				30			
Leu	Glu	Leu	Glu	Ser	Ser	Gln	Asp	Ile	Gln	Asp	Val	Leu	Asp	Ala	Asn
			35				40				45				
Lys	Ser	Leu	Pro	Glu	Ser	Ser	Leu	Thr	Asp	Leu	Leu	Ser	Asp	Asn	Phe

50	55	60
Thr Asp Ser Leu Val Ser Phe Ser Ala Glu Ile Leu Ser Arg Thr Leu		
65	70	75
Cys Glu Pro Leu Val Ala Ser Leu Trp Met Lys Leu Gly Asn Thr Gly		80
	85	90
Ala Met Arg Arg Cys Val Lys Leu Thr Val Ala Leu Glu Thr Ala Glu		95
	100	105
Cys Glu Phe Pro Pro His Leu Asp Val Tyr Ile Glu Asp Pro His Leu		110
	115	120
Pro Pro Ser Leu Gly Leu Leu Pro Gly Ala Arg Val His Phe Ser Gln		125
	130	135
Leu Glu Lys Arg Val Ser Arg Ser His Asn Val Tyr Cys Cys Phe Arg		140
	145	150
Ser Ser Thr Tyr Val Gln Val Leu Ser Phe Pro Pro Glu Thr Thr Ile		155
	165	170
Ser Val Pro Leu Pro His Ile Tyr Leu Ala Glu Leu Leu Gln Gly Gly		175
	180	185
Gln Ser Pro Phe Gln Ala Thr Ala Ser Cys His Ile Val Ser Val Phe		190
	195	200
Ser Leu Gln Leu Phe Trp Val Cys Ala Tyr Cys Thr Ser Ile Cys Arg		205
	210	215
Gln Gly Lys Cys Thr Arg Leu Gly Ser Thr Cys Pro Thr Gln Thr Ala		220
	225	230
Ile Ser Gln Ala Ile Ile Arg Leu Leu Val Glu Asp Gly Thr Ala Glu		235
	245	250
Ala Val Val Thr Cys Arg Asn His His Val Ala Ala Ala Leu Gly Leu		255
	260	265
Cys Pro Arg Glu Trp Ala Ser Leu Leu Asp Phe Val Gln Val Pro Gly		270
	275	280
Arg Val Val Leu Gln Phe Ala Gly Pro Gly Ala Gln Leu Glu Ser Ser		285
	290	295
Ala Arg Val Asp Glu Pro Met Thr Met Phe Leu Trp Thr Leu Cys Thr		300
	305	310
Ser Pro Ser Val Leu Arg Pro Ile Val Leu Ser Phe Glu Leu Glu Arg		315
	325	330
Lys Pro Ser Lys Ile Val Pro Leu Glu Pro Pro Arg Leu Gln Arg Phe		335
	340	345
Gln Cys Gly Glu Leu Pro Phe Leu Thr His Val Asn Pro Arg Leu Arg		350
	355	360
Leu Ser Cys Leu Ser Ile Arg Glu Ser Glu Tyr Ser Ser Ser Leu Gly		365
	370	375
Ile Leu Ala Ser Ser Cys		380
385	390	

&lt;210&gt; 2809

&lt;211&gt; 1502

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2809

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120

actgttaagc gctggcccag tccccccacc ccaccagcc gtgtactgcc tgggctcccc  
180  
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240  
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300  
cagaatccag agctcgtagc tgtcctcagc tgtaactact gtttcagaat gttgctgctg  
360  
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aa  
1502

&lt;210&gt; 2810

&lt;211&gt; 102

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2810

Glu Cys Ala Cys Ala Arg Val Cys Val Cys Val Arg Leu Cys Val Arg  
 1 5 10 15  
 Val Cys Val Cys Ala Arg Leu Cys Val Cys Val Cys Ala Ser Val Cys  
 20 25 30  
 Ala Cys Val Cys Ala Cys Val Arg Leu Cys Val Arg Leu Cys Ala Cys  
 35 40 45  
 Val Cys Ala Ser Val Cys Met Cys Ala Arg Ala Xaa Val Cys Val Cys  
 50 55 60  
 Thr Cys Val Xaa Leu Cys Thr Arg Val Cys Val Cys Val His Ala Cys  
 65 70 75 80  
 Val Cys Val Cys Ala Arg Ala Cys Thr Ser Pro Pro Glu His Leu Gly  
 85 90 95  
 Phe Gly Thr Arg Trp Phe  
 100

&lt;210&gt; 2811

&lt;211&gt; 591

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2811

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 300  
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 591

&lt;210&gt; 2812

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2812

Met His Pro Ser Ser Ser Ala Ser Gln Pro Ser Val Ala Arg Arg Gln  
 1 5 10 15  
 Ser Pro Ser Leu Gly Gly Lys Ser Pro Glu Pro Ser Leu Pro Xaa Cys  
 20 25 30  
 Pro Ala Pro Ala Val Asp Glu Pro Gln Pro Xaa Ser Gln Ala Pro Pro

35	40	45
Gly Pro Arg Val Pro Gly Pro Pro Arg Pro Trp Gly Ala Ala Pro Leu		
50	55	60
Arg Pro Arg Pro Gly Glu Gly Asp Pro Val Thr Arg Glu Arg Ser Pro		
65	70	75
Val Pro Gly Ala Thr Glu Met Pro Pro Pro Arg Pro Lys Val Pro Ala		
85	90	95
Pro Pro Gly Pro Thr Gly Arg Ser Pro Arg Ala Ala Val Gly His His		
100	105	110
Arg Ala Ala Gly Pro Pro Gly Cys Val Gly Pro Ser Leu Ser Gly Gln		
115	120	125
Leu Gly Ser		
130		

&lt;210&gt; 2813

&lt;211&gt; 2417

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2813

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240
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1020

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2400  
aaaaaaaaaa aaaaaaa  
2417

&lt;210&gt; 2814

&lt;211&gt; 471

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2814

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Gly Glu Asp Ile Pro Asp Phe Ser Ser Leu Lys Glu Glu Thr Ala Tyr
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Trp Lys Glu Leu Ser Leu Lys Tyr Lys Gln Ser Phe Gln Glu Ala Arg
      35           40           45
Asp Glu Leu Val Glu Phe Gln Glu Gly Ser Arg Glu Leu Glu Ala Glu
 50           55           60
Leu Glu Ala Gln Leu Val Gln Ala Glu Gln Arg Asn Arg Asp Leu Gln
65           70           75           80
Ala Asp Asn Gln Arg Leu Lys Tyr Glu Val Glu Ala Leu Lys Glu Lys
      85           90           95
Leu Glu His Gln Tyr Ala Gln Ser Tyr Lys Gln Val Ser Val Leu Glu
      100           105           110
Asp Asp Leu Ser Gln Thr Arg Ala Ile Lys Glu Gln Leu His Lys Tyr
      115           120           125
Val Arg Glu Leu Glu Gln Ala Asn Asp Asp Leu Glu Arg Ala Lys Arg
      130           135           140
Ala Thr Ile Val Ser Leu Glu Thr Leu Asn Lys Leu Asn Gln Ala Ile
145           150           155           160
Glu Arg Asn Ala Phe Leu Glu Ser Glu Leu Asp Glu Lys Glu Ser Leu
      165           170           175
Leu Val Ser Val Gln Arg Leu Lys Asp Glu Ala Arg Asp Leu Arg Gln
      180           185           190
Glu Leu Ala Val Arg Glu Arg Gln Gln Glu Val Thr Arg Lys Ser Ala
      195           200           205
Pro Ser Ser Pro Thr Leu Asp Cys Glu Lys Met Asp Ser Ala Val Gln
210           215           220
Ala Ser Leu Ser Leu Pro Ala Thr Pro Val Gly Lys Gly Thr Glu Asn
225           230           235           240
Thr Phe Pro Ser Pro Lys Ala Ile Pro Asn Gly Phe Gly Thr Ser Pro
      245           250           255
Leu Thr Pro Ser Ala Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu
      260           265           270
Leu Arg Lys Val Gly Ala Leu Glu Ser Lys Leu Ala Ala Cys Arg Asn
      275           280           285
Phe Ala Lys Asp Gln Ala Ser Arg Lys Ser Tyr Ile Ser Gly Asn Val
290           295           300
Asn Cys Gly Val Leu Asn Gly Asn Gly Thr Lys Phe Ser Arg Ser Gly
305           310           315           320
His Thr Ser Phe Phe Asp Lys Gly Ala Val Asn Gly Phe Asp Pro Ala
      325           330           335
Pro Pro Pro Pro Gly Leu Gly Ser Ser Arg Pro Ser Ser Ala Pro Gly
      340           345           350
Met Cys Leu Ser Val Cys Glu Cys Leu Ala Ser Arg Gly Ala Pro Ala
      355           360           365
Leu Leu Gln Gln Pro Arg Thr Pro Thr Pro His Pro Ser Val Pro Gly
      370           375           380
Pro Ser Pro Val Pro Leu Arg Leu Pro Pro His Gly Trp Gln Arg Ala
385           390           395           400
Gly Cys Met Gln Trp Arg Leu Leu Gly Pro Ala Gln Pro Arg Asn Ser
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Ala Arg Tyr Gln Tyr Trp Leu Phe Ser Leu Leu Ala Val Val Pro Leu

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	420		425		430										
Val	Ser	His	Asp	Cys	Thr	Phe	Val	Gly	Arg	Lys	Val	Ile	His	Thr	Cys
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Ile	Thr	Trp	Ser	Leu	Asp	Ala	Glu	Val	Pro	Ile	His	His	Thr	Cys	Pro
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Ile	Ala	Pro	Thr	Leu	Leu	Tyr									
465							470								

&lt;210&gt; 2815

&lt;211&gt; 1421

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2815

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<210> 2816

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2816

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Val	Gly	Gly	Thr	Glu	His	Ala	Tyr	Arg	Pro	Gly	Arg	Arg	Val	Cys	Ala
			20					25					30		
Val	Arg	Ala	His	Gly	Asp	Pro	Val	Ser	Glu	Ser	Phe	Val	Gln	Arg	Val
		35					40					45			
Tyr	Gln	Pro	Phe	Leu	Thr	Thr	Cys	Asp	Gly	His	Arg	Ala	Cys	Ser	Thr
	50					55					60				
Tyr	Arg	Thr	Ile	Tyr	Arg	Thr	Ala	Tyr	Arg	Arg	Ser	Pro	Gly	Leu	Ala
65					70				75					80	
Pro	Ala	Arg	Pro	Arg	Tyr	Ala	Cys	Cys	Pro	Gly	Trp	Lys	Arg	Thr	Ser
				85				90						95	
Gly	Leu	Pro	Gly	Ala	Cys	Gly	Ala	Ala	Ile	Cys	Gln	Pro	Pro	Cys	Arg
			100					105					110		
Asn	Gly	Gly	Ser	Cys	Val	Gln	Pro	Gly	Arg	Cys	Arg	Cys	Pro	Ala	Gly
	115						120					125			
Trp	Arg	Gly	Asp	Thr	Cys	Gln	Ser	Asp	Val	Asp	Glu	Cys	Ser	Ala	Arg
	130					135					140				
Arg	Gly	Gly	Cys	Pro	Gln	Arg	Cys	Val	Asn	Thr	Ala	Gly	Ser	Tyr	Trp
145					150				155					160	
Cys	Gln	Cys	Trp	Glu	Gly	His	Ser	Leu	Ser	Ala	Asp	Gly	Thr	Leu	Cys
				165				170						175	
Val	Pro	Lys	Gly	Gly	Pro	Pro	Arg	Val	Ala	Pro	Asn	Pro	Thr	Gly	Val
		180						185					190		
Asp	Ser	Ala	Met	Lys	Glu	Glu	Val	Gln	Arg	Leu	Gln	Ser	Arg	Val	Asp
	195						200					205			
Leu	Leu	Glu	Glu	Lys	Leu	Gln	Leu	Val	Leu	Ala	Pro	Leu	His	Ser	Leu
	210					215					220				
Ala	Ser	Gln	Ala	Gly	Ala	Trp	Ala	Pro	Gly	Pro	Arg	Gln	Pro	Pro	Gly
225					230				235					240	
Ala	Leu	Leu	Pro	Ala	Ala	Arg	Pro	His	Arg	Leu	Pro	Glu	Arg	Ala	Asp
				245				250						255	
Phe	Leu	Pro	Gly	Gly	Ala	Ala	Gly	Val	Leu	Leu	Leu	Gln	Glu	Arg	Leu
		260					265						270		
Xaa	Asp	Cys	Pro	Ala	Pro	Gln	Ala	Gly	Leu	Ser	Pro	Ser	Arg	Arg	Pro
	275						280					285			
Ala	Ala	Pro	Met	Pro	Leu	Pro	Asn	Met	Leu	Gly	Val	Gln	Lys	Pro	Pro
	290					295					300				
Arg	Gly	Asp													

305

&lt;210&gt; 2817

&lt;211&gt; 219

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2817

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 180  
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 219

&lt;210&gt; 2818

&lt;211&gt; 73

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2818

Xaa	Gly	Phe	Ser	Val	Ser	Leu	Ser	Phe	Phe	Leu	Val	Asp	His	Glu	Leu
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Leu	Arg	Gln	Glu	Leu	Asn	Thr	Arg	Phe	Leu	Val	Gln	Ser	Ala	Glu	Arg
			20					25					30		
Pro	Gly	Ala	Ser	Leu	Gly	Pro	Gly	Val	Leu	Leu	Arg	Ala	Glu	Phe	His
		35					40					45			
Gln	His	Gln	His	Thr	His	Gln	His	Thr	His	Gln	His	Thr	His	Gln	His
	50					55					60				
Gln	His	Thr	Phe	Ala	Pro	Phe	Thr	Arg							
65						70									

&lt;210&gt; 2819

&lt;211&gt; 730

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2819

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<210> 2820

<211> 195

<212> PRT

<213> Homo sapiens

<400> 2820

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			20					25					30		
Ser	Ala	Gly	Ala	Arg	Gly	His	Thr	Gly	Pro	Lys	Gly	Gln	Lys	Gly	Ser
		35					40					45			
Met	Gly	Ala	Pro	Gly	Glu	Arg	Cys	Lys	Ser	His	Tyr	Ala	Ala	Phe	Ser
	50					55					60				
Val	Gly	Arg	Glu	Ala	His	Ala	Gln	Gln	Pro	Leu	Leu	Pro	Asp	Val	Ile
65					70					75				80	
Phe	Asp	Thr	Glu	Phe	Val	Asn	Leu	Tyr	Asp	His	Phe	Asn	Met	Phe	Thr
			85						90					95	
Gly	Lys	Phe	Tyr	Cys	Tyr	Val	Pro	Gly	Leu	Tyr	Phe	Phe	Ser	Leu	Asn
			100					105					110		
Val	His	Thr	Trp	Asn	Gln	Lys	Glu	Thr	Tyr	Leu	His	Ile	Met	Lys	Asn
		115					120					125			
Glu	Glu	Glu	Val	Val	Ile	Leu	Phe	Ala	Gln	Val	Gly	Asp	Arg	Ser	Ile
	130					135					140				
Met	Gln	Ser	Gln	Ser	Leu	Met	Leu	Glu	Leu	Arg	Glu	Gln	Asp	Gln	Val
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Trp	Val	Arg	Leu	Tyr	Lys	Gly	Glu	Arg	Glu	Asn	Ala	Ile	Phe	Ser	Glu
			165						170					175	
Glu	Leu	Asp	Thr	Tyr	Ile	Thr	Phe	Ser	Gly	Tyr	Leu	Val	Lys	His	Ala
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Thr	Glu	Pro													
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<210> 2821

<211> 1746

<212> DNA

<213> Homo sapiens

<400> 2821

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<213> Homo sapiens

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<211> 506

<212> PRT

<213> Homo sapiens

<400> 2826

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<211> 481

<212> DNA

<213> Homo sapiens

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<211> 160

<212> PRT

<213> Homo sapiens

<400> 2828

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Ser Cys Leu Arg Ser Leu Val Leu Lys Arg Gly Gln Arg Arg Asp Thr			
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Ser Gly Leu Ala His Leu Ala His Leu Asp Leu Ser Phe Asn Ser Leu			
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Glu Thr Leu Pro Ala Cys Val Leu Gln Met Arg Gly Leu Gly Ala Leu			
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<211> 668

<212> PRT

<213> Homo sapiens

<400> 2830

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Cys	Met	Thr	Asp	Ala	Lys	Lys	Leu	Tyr	Thr	Leu	Phe	Tyr	Val	His	Gly
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His	Asp	Glu	His	Gly	Asp	Asp	Ser	Cys	Val	His	His	Cys	Glu	Asp	Lys
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 <212> PRT  
 <213> Homo sapiens

<400> 2832

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Gly Thr Arg Thr Ser Ser Gly Arg Leu Arg Arg Leu Gly Asp Ser Ser
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Gly Pro Ala Leu Lys Arg Ser Phe Glu Val Glu Glu Val Glu Thr Pro
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Asn Ser Thr Pro Pro Arg Arg Val Gln Thr Pro Leu Leu Arg Ala Thr
65           70           75           80
Val Ala Ser Ser Thr Gln Lys Phe Gln Asp Leu Gly Val Lys Asn Ser
          85           90           95
Glu Pro Ser Ala Arg His Val Asp Ser Leu Ser Gln Arg Ser Pro Lys
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Ala Ser Leu Arg Arg Val Glu Leu Ser Gly Pro Lys Ala Ala Glu Pro
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Val Ser Arg Arg Thr Glu Leu Ser Ile Asp Ile Ser Ser Lys Gln Val
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Glu Asn Ala Gly Ala Ile Gly Pro Ser Arg Phe Gly Leu Lys Arg Ala
145           150           155           160
Glu Val Leu Gly His Lys Thr Pro Glu Pro Ala Pro Arg Arg Thr Glu
          165          170          175
Ile Thr Ile Val Lys Pro Gln Glu Ser Ala His Arg Arg Met Glu Pro
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Pro Ala Ser Lys Val Pro Glu Val Pro Thr Ala Pro Ala Thr Asp Ala
          195          200          205
Ala Pro Lys Arg Val Glu Ile Gln Met Pro Lys Pro Ala Glu Ala Pro
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Thr Ala Pro Ser Pro Ala Gln Thr Leu Glu Asn Ser Glu Pro Ala Pro
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Val Ser Gln Leu Gln Ser Arg Leu Glu Pro Lys Pro Gln Pro Pro Val
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Ala Glu Ala Thr Pro Arg Ser Gln Glu Ala Thr Glu Ala Ala Pro Ser
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Cys Val Gly Asp Met Ala Asp Thr Pro Arg Asp Ala Gly Leu Lys Gln
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Ala Pro Ala Ser Arg Asn Glu Lys Ala Pro Val Asp Phe Gly Tyr Val
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Gly Ile Asp Ser Ile Leu Glu Gln Met Arg Arg Lys Ala Met Lys Gln
305           310           315           320
Gly Phe Glu Phe Asn Ile Met Val Val Gly Gln Ser Gly Leu Gly Lys
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Ser Thr Leu Ile Asn Thr Leu Phe Lys Ser Lys Ile Ser Arg Lys Ser
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Val Gln Pro Thr Ser Glu Glu Arg Ile Pro Lys Thr Ile Glu Ile Lys
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Ser Ile Thr His Asp Ile Glu Glu Lys Gly Val Arg Met Lys Leu Thr

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370	375	380
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Gln Glu Glu Val Asn Ile Asn Arg Lys Lys Arg Ile Pro Asp Thr Arg		415
	420	425
Val His Cys Cys Leu Tyr Phe Ile Pro Ala Thr Gly His Ser Leu Arg		430
	435	440
Pro Leu Asp Ile Glu Phe Met Lys Arg Leu Ser Lys Val Val Asn Ile		445
	450	455
Val Pro Val Ile Ala Lys Ala Asp Thr Leu Thr Leu Glu Glu Arg Val		460
465	470	475
His Phe Lys Gln Arg Ile Thr Ala Asp Leu Leu Ser Asn Gly Ile Asp		480
	485	490
Val Tyr Pro Gln Lys Glu Phe Asp Glu Asp Ser Glu Asp Arg Leu Val		495
	500	505
Asn Glu Lys Phe Arg Glu Met Ile Pro Phe Ala Val Val Gly Ser Asp		510
	515	520
His Glu Tyr Gln Val Asn Gly Lys Arg Ile Leu Gly Arg Lys Thr Lys		525
	530	535
Trp Gly Thr Ile Glu Val Glu Asn Thr Thr His Cys Glu Phe Ala Tyr		540
545	550	555
Leu Arg Asp Leu Leu Ile Arg Thr His Met Gln Asn Ile Lys Asp Ile		560
	565	570
Thr Ser Ser Ile His Phe Glu Ala Tyr Arg Val Lys Arg Leu Asn Glu		575
	580	585
Gly Ser Ser Ala Met Ala Asn Gly Val Glu Glu Lys Glu Pro Glu Ala		590
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Pro Glu Met		
610		

&lt;210&gt; 2833

&lt;211&gt; 420

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2833

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&lt;210&gt; 2834

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 Ser Gly Arg Asn Val Thr Thr Gly Ser Leu Gly Glu Pro Gln Trp Leu  
           35                  40                  45  
 Arg Val Ala Thr Gly Gly Arg Pro Gly Thr Ser Pro Ala Leu Phe Ser  
           50                  55                  60  
 Gly Arg Gly Ala Ala Thr Gly Gly Arg Gln Gly Gly Arg Phe Asp Thr  
 65                  70                  75                  80  
 Lys Cys Leu Ala Ala Ala Thr Trp Gly Arg Leu Pro Gly Pro Glu Glu  
                   85                  90                  95  
 Thr Leu Pro Gly Gln Asp Ser Trp Asn Gly Val Pro Ser Arg Ala Gly  
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 Leu Gly Met Cys Ala  
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 <213> Homo sapiens

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 Thr Leu Ser Val Arg Gly Glu Asp Ile Gly Glu Asp Leu Phe Ser Glu  
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 Ala Leu Gly Arg Ala Val Gly Gln Trp Ala Gly Ala Lys Leu Leu Asp  
 65 70 75 80  
 His Gly Cys Val Glu Ser Ser Ile Leu Asp Ser Ser Ala Gly Ser Ala  
 85 90 95  
 Pro His Tyr Glu Val Phe Val Ala Leu Arg Gly Leu Arg Asn Leu Ser  
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 Glu Glu Asn Arg Asp Lys Leu Asp His Cys Leu Gln Glu Ala Ser Pro  
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 Arg Tyr Lys Ser Leu Arg Phe Trp Gly Ser Val Gly Pro Ala Glu Ser  
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 Leu Gly

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<210> 2838

<211> 370

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Ser	Glu	Glu	Glu	Glu	Ala	Asn	Tyr	Trp	Lys	Asp	Leu	Ala	Met	Thr	Tyr
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Glu	Thr	Arg	Asn	Arg	Asp	Leu	Leu	Ser	Glu	Asn	Asn	Arg	Leu	Arg	Met
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Ile Lys Asp Gln Leu Gln Lys Tyr Ile Arg Glu Leu Glu Gln Ala Asn		
130	135	140
Asp Ala Leu Glu Arg Ala Lys Arg Ala Thr Ile Met Ser Leu Glu Asp		
145	150	155
Phe Glu Gln Arg Leu Asn Gln Ala Ile Glu Arg Asn Ala Phe Leu Glu		
165	170	175
Ser Glu Leu Asp Glu Lys Glu Asn Leu Leu Glu Ser Val Gln Arg Leu		
180	185	190
Lys Asp Glu Ala Arg Asp Leu Arg Gln Glu Leu Ala Val Gln Gln Lys		
195	200	205
Gln Glu Lys Pro Arg Thr Pro Met Pro Ser Ser Val Glu Ala Glu Arg		
210	215	220
Thr Asp Thr Ala Val Gln Ala Thr Gly Ser Val Pro Ser Thr Pro Ile		
225	230	235
Ala His Arg Gly Pro Ser Ser Ser Leu Asn Thr Pro Gly Ser Phe Arg		
245	250	255
Arg Gly Leu Asp Asp Xaa His Arg Gly Thr Pro Leu Thr Pro Ala Ala		
260	265	270
Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu Leu Arg Lys Val Gly		
275	280	285
Ala Leu Glu Ser Lys Leu Ala Ser Cys Arg Asn Leu Val Tyr Asp Gln		
290	295	300
Ser Pro Asn Arg Thr Gly Gly Pro Ala Ser Gly Arg Ser Ser Lys Asn		
305	310	315
Arg Asp Gly Gly Glu Arg Arg Pro Ser Ser Thr Ser Val Pro Leu Gly		
325	330	335
Asp Lys Gly Ser Val Pro Ser Asn Lys Pro Leu Ala Gly Gly Glu Asn		
340	345	350
Pro Pro Ala Pro Gly Lys Arg His Ser Pro Pro Ala His Ser His Val		
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Ser Phe		
370		

&lt;210&gt; 2839

&lt;211&gt; 606

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2839

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 606

<210> 2840

<211> 202

<212> PRT

<213> Homo sapiens

<400> 2840

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		20						25					30		
Ala	Thr	Asn	Gly	Asp	Pro	Arg	Asn	Ser	Cys	Ser	Leu	His	Tyr	Ile	His
		35					40					45			
Pro	Tyr	Gln	Pro	Asn	Glu	Tyr	Leu	Lys	Ala	Leu	Val	Ala	Val	Gly	Glu
	50					55					60				
Ile	Cys	Gln	Asp	Tyr	Asp	Ser	Asp	Lys	Met	Phe	Pro	Ala	Phe	Gly	Phe
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Gly	Ala	Arg	Ile	Pro	Pro	Glu	Tyr	Thr	Val	Ser	His	Asp	Phe	Ala	Ile
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Asn	Phe	Asn	Glu	Asp	Asn	Pro	Glu	Cys	Ala	Gly	Ile	Gln	Gly	Val	Val
			100					105						110	
Glu	Ala	Tyr	Gln	Ser	Cys	Leu	Pro	Lys	Leu	Gln	Leu	Tyr	Gly	Pro	Thr
		115						120					125		
Asn	Ile	Ala	Pro	Ile	Ile	Gln	Lys	Val	Ala	Lys	Ser	Ala	Ser	Glu	Glu
		130				135						140			
Thr	Asn	Thr	Lys	Glu	Ala	Ser	Gln	Tyr	Phe	Ile	Leu	Leu	Ile	Leu	Thr
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Asp	Gly	Val	Ile	Thr	Asp	Met	Gly	Asp	Thr	Arg	Glu	Ala	Ile	Val	His
				165					170					175	
Ala	Ser	His	Leu	Pro	Met	Ser	Val	Ile	Ile	Val	Gly	Val	Gly	Asn	Ala
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<210> 2841

<211> 2065

<212> DNA

<213> Homo sapiens

<400> 2841

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<210> 2842

<211> 540

<212> PRT

<213> Homo sapiens

<400> 2842

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Pro	Pro	Val	Gly	Thr	Gly	Arg	Ser	Pro	Arg	Lys	Arg	Thr	Thr	Ser	Gln	35	40	45	
Cys	Lys	Ser	Glu	Pro	Pro	Leu	Leu	Arg	Thr	Ser	Lys	Arg	Thr	Ile	Tyr	50	55	60	
Thr	Ala	Gly	Arg	Pro	Pro	Trp	Tyr	Asn	Glu	His	Gly	Thr	Gln	Ser	Lys	65	70	75	80
Glu	Ala	Phe	Ala	Ile	Gly	Leu	Gly	Gly	Gly	Ser	Ala	Ser	Gly	Lys	Thr	85	90	95	
Thr	Val	Ala	Arg	Met	Ile	Ile	Glu	Ala	Leu	Asp	Val	Pro	Trp	Val	Val	100	105	110	
Leu	Leu	Ser	Met	Asp	Ser	Phe	Tyr	Lys	Val	Leu	His	Ser	Leu	Pro	His	115	120	125	
Gln	Val	Leu	Thr	Glu	Gln	Gln	Gln	Glu	Gln	Ala	Ala	His	Asn	Asn	Phe	130	135	140	
Asn	Phe	Asp	His	Pro	Asp	Ala	Phe	Asp	Phe	Asp	Leu	Ile	Ile	Ser	Thr	145	150	155	160
Leu	Lys	Lys	Leu	Lys	Gln	Gly	Lys	Ser	Val	Lys	Val	Pro	Ile	Tyr	Asp	165	170	175	
Phe	Thr	Thr	His	Ser	Arg	Lys	Lys	Asp	Trp	Lys	Thr	Leu	Tyr	Gly	Ala	180	185	190	
Asn	Val	Ile	Ile	Phe	Glu	Gly	Ile	Met	Ala	Phe	Ala	Asp	Lys	Thr	Leu	195	200	205	
Leu	Glu	Leu	Leu	Asp	Met	Lys	Ile	Phe	Val	Asp	Thr	Asp	Ser	Asp	Ile	210	215	220	
Arg	Leu	Val	Arg	Arg	Leu	Arg	Arg	Asp	Ile	Ser	Glu	Arg	Gly	Arg	Asp	225	230	235	240
Ile	Glu	Gly	Val	Ile	Lys	Gln	Tyr	Asn	Lys	Phe	Val	Lys	Pro	Ser	Phe	245	250	255	
Asp	Gln	Tyr	Ile	Gln	Pro	Thr	Met	Arg	Leu	Ala	Asp	Ile	Val	Val	Pro	260	265	270	
Arg	Gly	Ser	Gly	Asn	Thr	Val	Ala	Ile	Asp	Leu	Ile	Val	Gln	His	Val	275	280	285	
His	Ser	Gln	Leu	Glu	Glu	Arg	Glu	Leu	Ser	Val	Arg	Ala	Ala	Leu	Ala				

290		295		300
Ser Ala His Gln Cys His Pro Leu Pro Arg Thr Leu Ser Val Leu Lys				
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Ser Thr Pro Gln Val Arg Gly Met His Thr Ile Ile Arg Asp Lys Glu				
	325		330	335
Thr Ser Arg Asp Glu Phe Ile Phe Tyr Ser Lys Arg Leu Met Arg Leu				
	340		345	350
Leu Ile Glu His Ala Leu Ser Phe Leu Pro Phe Gln Asp Cys Val Val				
	355		360	365
Gln Thr Pro Gln Gly Gln Asp Tyr Ala Gly Lys Cys Tyr Ala Gly Lys				
	370		375	380
Gln Ile Thr Gly Val Ser Ile Leu Arg Ala Gly Glu Thr Met Glu Pro				
385		390		400
Ala Leu Arg Ala Val Cys Lys Asp Val Arg Ile Gly Thr Ile Leu Ile				
	405		410	415
Gln Thr Asn Gln Leu Thr Gly Glu Pro Glu Leu His Tyr Leu Arg Leu				
	420		425	430
Pro Lys Asp Ile Ser Asp Asp His Val Ile Leu Met Asp Cys Thr Val				
	435		440	445
Ser Thr Gly Ala Ala Ala Met Met Ala Val Arg Val Leu Leu Asp His				
	450		455	460
Asp Val Pro Glu Asp Lys Ile Phe Leu Leu Ser Leu Leu Met Ala Glu				
465		470		480
Met Gly Val His Ser Val Ala Tyr Ala Phe Pro Arg Val Arg Ile Ile				
	485		490	495
Thr Thr Ala Val Asp Lys Arg Val Asn Asp Leu Phe Arg Ile Ile Pro				
	500		505	510
Gly Ile Gly Asn Phe Gly Asp Arg Tyr Phe Gly Thr Asp Ala Val Pro				
	515		520	525
Asp Gly Ser Asp Glu Glu Glu Val Ala Tyr Thr Gly				
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&lt;210&gt; 2843

&lt;211&gt; 497

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2843

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35 40 45  
Ser Ser Lys Phe Gln Glu Gly Ala Glu Met Leu Leu Asn Pro Glu Glu  
50 55 60  
Lys Ser Pro Leu Asn Ile Ser Val Gly Val His Pro Leu Asp Ser Phe  
65 70 75 80  
Thr Gln Gly Phe Gly Glu Gln Pro Thr Gly Asp Leu Pro Ile Gly Pro  
85 90 95  
Pro Phe Glu Met Pro Thr Gly Ala Leu Leu Ser Thr Pro Gln Phe Glu  
100 105 110  
Met Leu Gln Asn Pro Leu Gly Leu Thr Gly Ala Leu Arg Gly Pro Gly  
115 120 125  
Arg Arg Gly Gly Arg Ala Arg Gly Gly Gln Gly Pro Arg Pro Asn Ile  
130 135 140  
Cys Gly Ile Trp Gly Lys Ser Phe Gly Arg Asp Tyr Pro Asp Pro Ala  
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Gln Ala Ser Thr Pro  
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<212> DNA  
<213> Homo sapiens

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<211> 149

<212> PRT

<213> Homo sapiens

<400> 2846

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Leu	Pro	Cys	Pro	Leu	Gly	Ser	Gly	Arg	Leu	Trp	Leu	Met	Pro	Thr	Arg
			20					25					30		
Cys	His	Lys	Gly	Leu	Ser	Asp	Arg	Cys	Ser	Pro	Ser	Leu	Pro	Cys	Leu
		35					40					45			
Pro	His	Arg	Pro	Ser	Pro	Pro	Glu	Pro	Ala	Phe	Leu	Pro	Gln	His	Leu
		50				55					60				
Pro	Ser	Leu	Ala	Thr	Gly	Tyr	Ile	Cys	Val	Asp	Cys	Leu	Ser	Leu	His
65					70					75				80	
Gly	Asn	Val	Arg	Thr	Ile	Phe	Val	Cys	Cys	Gly	Thr	Ala	Ala	Leu	Arg
				85				90						95	
Ala	Ala	Ser	Ser	Thr	Gln	Val	Ala	Leu	Asp	Thr	Asp	Cys	Thr	Gln	Gly
			100					105					110		
Glu	Leu	Gly	Leu	Ile	Thr	Pro	Leu	Thr	Arg	Gly	Glu	Thr	Leu	Gln	Leu
		115					120					125			
Glu	Val	Thr	Phe	Ile	Pro	Leu	Gln	Leu	Arg	Pro	Phe	His	Ser	Pro	Arg
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Thr	His	Arg	Gly	Ala											
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<210> 2847

<211> 2830

<212> DNA

<213> Homo sapiens

<400> 2847

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 2830

&lt;210&gt; 2848

&lt;211&gt; 856

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2848

Xaa	Asp	His	Asp	Ile	Ala	His	Ile	Pro	Ala	Ser	Ala	Val	Ile	Ser	Ala
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Ser	Thr	Ser	Gln	Val	Pro	Ser	Ile	Ala	Thr	Val	Pro	Pro	Cys	Leu	Thr
		20						25					30		
Thr	Ser	Ala	Pro	Leu	Ile	Arg	Arg	Gln	Leu	Ser	His	Asp	His	Glu	Ser
		35				40					45				
Val	Gly	Pro	Pro	Ser	Leu	Asp	Ala	Gln	Pro	Asn	Ser	Lys	Thr	Glu	Arg
	50					55					60				
Ser	Lys	Ser	Tyr	Asp	Glu	Gly	Leu	Asp	Asp	Tyr	Arg	Glu	Asp	Ala	Lys

65					70					75				80	
Leu	Ser	Phe	Lys	His	Val	Ser	Ser	Leu	Lys	Gly	Ile	Lys	Ile	Ala	Asp
				85					90					95	
Ser	Gln	Lys	Ser	Ser	Glu	Asp	Ser	Gly	Ser	Arg	Lys	Asp	Ser	Ser	Ser
			100					105					110		
Glu	Val	Phe	Ser	Asp	Ala	Ala	Lys	Glu	Gly	Trp	Leu	His	Phe	Arg	Pro
		115					120					125			
Leu	Val	Thr	Asp	Lys	Gly	Lys	Arg	Val	Gly	Gly	Ser	Ile	Arg	Pro	Trp
	130					135					140				
Lys	Gln	Met	Tyr	Val	Val	Leu	Arg	Gly	His	Ser	Leu	Tyr	Leu	Tyr	Lys
145					150					155					160
Asp	Lys	Arg	Glu	Gln	Thr	Thr	Pro	Ser	Glu	Glu	Gln	Pro	Ile	Ser	
			165						170				175		
Val	Asn	Ala	Cys	Leu	Ile	Asp	Ile	Ser	Tyr	Ser	Glu	Thr	Lys	Arg	Lys
		180							185				190		
Asn	Val	Phe	Arg	Leu	Thr	Thr	Ser	Asp	Cys	Glu	Cys	Leu	Phe	Gln	Ala
	195						200					205			
Glu	Asp	Arg	Asp	Asp	Met	Leu	Ala	Trp	Ile	Lys	Thr	Ile	Gln	Glu	Ser
	210					215					220				
Ser	Asn	Leu	Asn	Glu	Glu	Asp	Thr	Gly	Val	Thr	Asn	Arg	Asp	Leu	Ile
225					230					235					240
Ser	Arg	Arg	Ile	Lys	Glu	Tyr	Asn	Asn	Leu	Met	Ser	Lys	Ala	Glu	Gln
			245						250					255	
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		260						265					270		
Gly	Ala	Lys	Ser	Glu	Pro	Lys	Thr	Gln	Ser	Pro	His	Ser	Pro	Lys	Glu
	275						280					285			
Glu	Ser	Glu	Arg	Lys	Leu	Leu	Ser	Lys	Asp	Asp	Thr	Ser	Pro	Pro	Lys
	290					295					300				
Asp	Lys	Gly	Thr	Trp	Arg	Lys	Gly	Ile	Pro	Ser	Ile	Met	Arg	Lys	Thr
305					310					315					320
Phe	Glu	Lys	Lys	Pro	Thr	Ala	Thr	Gly	Thr	Phe	Gly	Val	Arg	Leu	Asp
			325						330					335	
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		340						345					350		
Ile	Cys	Cys	Lys	Leu	Val	Glu	Glu	Arg	Gly	Leu	Glu	Tyr	Thr	Gly	Ile
	355						360					365			
Tyr	Arg	Val	Pro	Gly	Asn	Asn	Ala	Ala	Ile	Ser	Ser	Met	Gln	Glu	Glu
	370					375					380				
Leu	Asn	Lys	Gly	Met	Ala	Asp	Ile	Asp	Ile	Gln	Asp	Asp	Lys	Trp	Arg
385					390					395					400
Asp	Leu	Asn	Val	Ile	Ser	Ser	Leu	Leu	Lys	Ser	Phe	Phe	Arg	Lys	Leu
			405						410					415	
Pro	Glu	Pro	Leu	Phe	Thr	Asn	Asp	Lys	Tyr	Ala	Asp	Phe	Ile	Glu	Ala
		420						425					430		
Asn	Arg	Lys	Glu	Asp	Pro	Leu	Asp	Arg	Leu	Lys	Thr	Leu	Lys	Arg	Leu
	435						440					445			
Ile	His	Asp	Leu	Pro	Glu	His	His	Tyr	Glu	Thr	Leu	Lys	Phe	Leu	Ser
	450					455					460				
Ala	His	Leu	Lys	Thr	Val	Ala	Glu	Asn	Ser	Glu	Lys	Asn	Lys	Met	Glu
465					470					475					480
Pro	Arg	Asn	Leu	Ala	Ile	Val	Phe	Gly	Pro	Thr	Leu	Val	Arg	Thr	Ser
			485						490					495	
Glu	Asp	Asn	Met	Thr	His	Met	Val	Thr	His	Met	Pro	Asp	Gln	Tyr	Lys



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Ile Val Glu Thr Leu Ile Gln His His Asp Trp Phe Phe Thr Glu Glu					
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Gly Ala Glu Glu Pro Leu Thr Thr Val Gln Glu Glu Ser Thr Val Asp					
	530		535		540
Ser Gln Pro Val Pro Asn Ile Asp His Leu Leu Thr Asn Ile Gly Arg					
545		550		555	560
Thr Gly Val Ser Pro Gly Asp Val Ser Asp Ser Ala Thr Ser Asp Ser					
	565		570		575
Thr Lys Ser Lys Gly Ser Trp Gly Ser Gly Lys Asp Gln Tyr Ser Arg					
	580		585		590
Glu Leu Leu Val Ser Ser Ile Phe Ala Ala Ala Ser Arg Lys Arg Lys					
	595		600		605
Lys Pro Lys Glu Lys Ala Gln Pro Ser Ser Ser Glu Asp Glu Leu Asp					
	610		615		620
Asn Val Phe Phe Lys Lys Glu Asn Val Glu Gln Cys His Asn Asp Thr					
625		630		635	640
Lys Glu Glu Ser Lys Lys Glu Ser Glu Thr Leu Gly Arg Lys Gln Lys					
	645		650		655
Ile Ile Ile Ala Lys Glu Asn Ser Thr Arg Lys Asp Pro Ser Thr Thr					
	660		665		670
Lys Asp Glu Lys Ile Ser Leu Gly Lys Glu Ser Thr Pro Ser Glu Glu					
	675		680		685
Pro Ser Pro Pro His Asn Ser Lys His Asn Lys Ser Pro Thr Leu Ser					
	690		695		700
Cys Arg Phe Ala Ile Leu Lys Glu Ser Pro Arg Ser Leu Leu Ala Gln					
705		710		715	720
Lys Ser Ser His Leu Glu Glu Thr Gly Ser Asp Ser Gly Thr Leu Leu					
	725		730		735
Ser Thr Ser Ser Gln Ala Ser Leu Ala Arg Phe Ser Met Lys Lys Ser					
	740		745		750
Thr Ser Pro Glu Thr Lys His Ser Glu Phe Leu Ala Asn Val Ser Thr					
	755		760		765
Ile Thr Ser Asp Tyr Ser Thr Thr Ser Ser Ala Thr Tyr Leu Thr Ser					
	770		775		780
Leu Asp Ser Ser Arg Leu Ser Pro Glu Val Gln Ser Val Ala Glu Ser					
785		790		795	800
Lys Gly Asp Glu Ala Asp Asp Glu Arg Ser Glu Leu Ile Ser Glu Gly					
	805		810		815
Arg Pro Val Glu Thr Asp Ser Gly Asn Glu Phe Pro Ile Phe Pro Thr					
	820		825		830
Ala Leu Thr Ser Glu Arg Leu Phe Arg Gly Glu Leu Gln Lys Val Thr					
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Lys Ser Ser Arg Arg Asn Ser Glu					
850		855			

&lt;210&gt; 2849

&lt;211&gt; 380

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2849

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 180  
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<210> 2850

<211> 76

<212> PRT

<213> Homo sapiens

<400> 2850

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Ala	Lys	Pro	Glu	Pro	Ala	Pro	Ala	Pro	Pro	Pro	Pro	Gly	Ala	Lys	Pro
			20					25				30			
Glu	Glu	Asp	Lys	Lys	Asp	Gly	Lys	Glu	Pro	Ser	Asp	Lys	Pro	Gln	Lys
		35				40					45				
Ala	Val	Gln	Asp	His	Lys	Glu	Pro	Ser	Asp	Lys	Pro	Gln	Lys	Ala	Val
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Gln	Pro	Lys	His	Glu	Val	Gly	Thr	Lys	Glu	Gly	Cys				
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<210> 2851

<211> 2459

<212> DNA

<213> Homo sapiens

<400> 2851

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 ccatttcata gagatttgct ccgatatgcc aagctgatgg agtggctaaa gagtacagat  
 120  
 tatggaaaat atgaaggact aacaaagaat tacatggatt atttatcccg actatatgaa  
 180  
 agagaaatca aagatttctt tgaagttgca aagatcaaga tgactggcac aactaaagaa  
 240  
 agcaagaagt ttggtcttca tggaagttcg gggaaattaa ctggatctac ttctagtcta  
 300  
 aataagctca gtgttcagag ttcagggaat cgcagatctc agtcatcttc cctgttggat  
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1980  
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2160

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<210> 2852

<211> 317

<212> PRT

<213> Homo sapiens

<400> 2852

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			20					25					30		
Leu	Tyr	Met	Leu	Val	Lys	Met	Ser	His	His	Val	Trp	Thr	Ala	Gln	Asn
		35					40					45			
Val	Asp	Pro	Ala	Ser	Phe	Leu	Ser	Thr	Thr	Leu	Gly	Asn	Val	Leu	Val
	50					55					60				
Thr	Val	Lys	Arg	Asn	Phe	Asp	Lys	Cys	Ile	Ser	Asn	Gln	Ile	Arg	Gln
65				70					75					80	
Met	Glu	Glu	Val	Lys	Ile	Ser	Lys	Lys	Ser	Lys	Val	Gly	Ile	Leu	Pro
				85				90						95	
Phe	Val	Ala	Glu	Phe	Glu	Glu	Phe	Ala	Gly	Leu	Ala	Glu	Ser	Ile	Phe
			100					105					110		
Lys	Asn	Ala	Glu	Arg	Arg	Gly	Asp	Leu	Asp	Lys	Ala	Tyr	Thr	Lys	Leu
		115				120						125			
Ile	Arg	Gly	Val	Phe	Val	Asn	Val	Glu	Lys	Val	Ala	Asn	Glu	Ser	Gln
	130					135					140				
Lys	Thr	Pro	Arg	Asp	Val	Val	Met	Met	Glu	Asn	Phe	His	His	Ile	Phe
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Ala	Thr	Leu	Ser	Arg	Leu	Lys	Ile	Ser	Cys	Leu	Glu	Ala	Glu	Lys	Lys
			165					170						175	
Glu	Ala	Lys	Gln	Lys	Tyr	Thr	Asp	His	Leu	Gln	Ser	Tyr	Val	Ile	Tyr
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Ser	Leu	Gly	Gln	Pro	Leu	Glu	Lys	Leu	Asn	His	Phe	Phe	Glu	Gly	Val
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Glu	Ala	Arg	Val	Ala	Gln	Gly	Ile	Arg	Glu	Glu	Glu	Val	Ser	Tyr	Gln
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Leu	Ala	Phe	Asn	Lys	Gln	Glu	Leu	Arg	Lys	Val	Ile	Lys	Glu	Tyr	Pro
225				230					235					240	
Gly	Lys	Glu	Val	Lys	Lys	Gly	Leu	Asp	Asn	Leu	Tyr	Lys	Lys	Val	Asp
			245					250						255	
Lys	His	Leu	Cys	Glu	Glu	Glu	Asn	Leu	Leu	Gln	Val	Val	Trp	His	Ser
	260						265						270		
Met	Gln	Asp	Glu	Phe	Ile	Arg	Gln	Tyr	Lys	His	Phe	Glu	Gly	Leu	Ile
	275						280					285			
Ala	Arg	Cys	Tyr	Pro	Gly	Ser	Gly	Val	Thr	Met	Glu	Phe	Thr	Ile	Gln

290	295	300
Asp Ile Leu Asp Tyr Cys Ser Ser Ile Ala Gln Ser His		
305	310	315

&lt;210&gt; 2853

&lt;211&gt; 4993

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2853

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<213> Homo sapiens

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&lt;211&gt; 1676

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2855

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<213> Homo sapiens

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&lt;210&gt; 2858

&lt;211&gt; 220

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2858

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Pro	Glu	Cys	Ser	Val	Lys	Gly	Arg	Thr	Glu	Ser	Phe	His	Cys	Pro	Pro
		35					40					45			
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Leu	Ala	Gln	Cys	Arg	Gln	Ala	Arg	Arg	Thr	Arg	Ser	Glu	Val	Thr	Leu
65		70								75					80
Leu	Trp	Lys	Asn	Asn	Leu	Pro	Ile	Met	Val	Glu	Met	Met	Leu	Leu	Pro
			85						90					95	
Asp	Cys	Cys	Tyr	Ser	Asp	Asp	Gly	Pro	Thr	Thr	Glu	Gly	Ile	Asp	Leu
			100					105					110		
Asn	Asp	Pro	Ala	Ile	Lys	Gln	Asp	Ala	Leu	Leu	Leu	Glu	Arg	Trp	Ile
		115						120					125		
Leu	Glu	Pro	Val	Pro	Arg	Gln	Asn	Gly	Asp	Arg	Phe	Ile	Glu	Glu	Lys
		130				135					140				
Thr	Leu	Leu	Leu	Ala	Val	Arg	Ser	Phe	Val	Phe	Phe	Ser	Gln	Leu	Ser
145					150					155					160
Ala	Trp	Leu	Ser	Val	Ser	His	Gly	Ala	Ile	Pro	Arg	Asn	Ile	Leu	Tyr
				165						170					175
Arg	Ile	Ser	Ala	Ala	Asp	Val	Asp	Leu	Gln	Trp	Asn	Phe	Ser	Gln	Thr
			180					185					190		
Pro	Ile	Glu	His	Val	Phe	Pro	Val	Pro	Asn	Val	Ser	His	Asn	Val	Ala
		195						200					205		
Leu	Lys	Val	Ser	Gly	Gln	Ser	Leu	Ala	Gln	Thr	Ile				
		210						215			220				

&lt;210&gt; 2859

&lt;211&gt; 1029

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2859

```

ntgcagaagg aaattgcact cgtctcctcc gcgcccccg gacccaacac aatgcaccag
60
ccgcctgagt ccaccgccgc ggccgccgcc gctgcagaca ttagcgctag gaagatggcg
120
caccggcaa tgttcctcgc aaggggcagc ggtagtggca gcgcctctgc tctcaatgca
180
gcaggtaccg gcgtcggtag taatgccaca tcttcgagg attttcgcc tccgtcgctg
240
cttcagccgc cgccccctgc agcatcttct acgtcgggac cacagcctcc gcctccacaa
300
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360
caaatgaaaa agaaaagtgg cttccagata actagcgta ctctgctca gatctccgct
420
agtatcagct ctaacaacag tatagcagag gacactgaga gctatgatga tctggatgaa
480
tctcacacgg aagatctctc ttcttcggag atccttgatg tgtcactttc cagggtact
540
gacttagggg agcccgaacg cagctcctca gaagagaccc taaataactt ccaggaagcc
600
gagacacctg gggcagtctc tcccaaccag cccaccttc ctcagcctca tttgcctcac
660
cttcacaaac agaattgtgt gatcaatggg aatgctcatc cacaccact ccataccac
720
catcagattc atcatgggca ccacctcaa catggtcacc accatccatc tcatgttget
780

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gtggccagtg catccattac tgggtgggccca ccctcaagcc cagtatctag aaaactctct
840
acaactggaa gctctgacag tatcacacca gttgcaccaa cttctgctgt atcatccagt
900
ggttcacctg catctgtaat gactaatatg cgtgctccaa gtactacagg tggaataggt
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1020
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1029
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<210> 2860

<211> 343

<212> PRT

<213> Homo sapiens

<400> 2860

Xaa	Gln	Lys	Glu	Ile	Ala	Leu	Val	Ser	Ser	Ala	Pro	Pro	Gly	Pro	Asn
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Thr	Met	His	Gln	Pro	Pro	Glu	Ser	Thr	Ala	Ala	Ala	Ala	Ala	Ala	Ala
			20					25					30		
Asp	Ile	Ser	Ala	Arg	Lys	Met	Ala	His	Pro	Ala	Met	Phe	Pro	Arg	Arg
		35					40					45			
Gly	Ser	Gly	Ser	Gly	Ser	Ala	Ser	Ala	Leu	Asn	Ala	Ala	Gly	Thr	Gly
	50					55					60				
Val	Gly	Ser	Asn	Ala	Thr	Ser	Ser	Glu	Asp	Phe	Pro	Pro	Pro	Ser	Leu
65					70					75					80
Leu	Gln	Pro	Pro	Pro	Pro	Ala	Ala	Ser	Ser	Thr	Ser	Gly	Pro	Gln	Pro
				85					90					95	
Pro	Pro	Pro	Gln	Ser	Leu	Asn	Leu	Leu	Ser	Gln	Ala	Gln	Leu	Gln	Ala
			100					105					110		
Gln	Pro	Leu	Ala	Pro	Gly	Gly	Thr	Gln	Met	Lys	Lys	Lys	Ser	Gly	Phe
		115					120					125			
Gln	Ile	Thr	Ser	Val	Thr	Pro	Ala	Gln	Ile	Ser	Ala	Ser	Ile	Ser	Ser
	130					135					140				
Asn	Asn	Ser	Ile	Ala	Glu	Asp	Thr	Glu	Ser	Tyr	Asp	Asp	Leu	Asp	Glu
145					150					155					160
Ser	His	Thr	Glu	Asp	Leu	Ser	Ser	Ser	Glu	Ile	Leu	Asp	Val	Ser	Leu
				165					170					175	
Ser	Arg	Ala	Thr	Asp	Leu	Gly	Glu	Pro	Glu	Arg	Ser	Ser	Ser	Glu	Glu
			180					185						190	
Thr	Leu	Asn	Asn	Phe	Gln	Glu	Ala	Glu	Thr	Pro	Gly	Ala	Val	Ser	Pro
		195					200					205			
Asn	Gln	Pro	His	Leu	Pro	Gln	Pro	His	Leu	Pro	His	Leu	Pro	Gln	Gln
	210					215					220				
Asn	Val	Val	Ile	Asn	Gly	Asn	Ala	His	Pro	His	His	Leu	His	His	His
225				230						235					240
His	Gln	Ile	His	His	Gly	His	His	Leu	Gln	His	Gly	His	His	His	Pro
				245					250					255	
Ser	His	Val	Ala	Val	Ala	Ser	Ala	Ser	Ile	Thr	Gly	Gly	Pro	Pro	Ser
			260					265					270		
Ser	Pro	Val	Ser	Arg	Lys	Leu	Ser	Thr	Thr	Gly	Ser	Ser	Asp	Ser	Ile
		275					280					285			
Thr	Pro	Val	Ala	Pro	Thr	Ser	Ala	Val	Ser	Ser	Ser	Gly	Ser	Pro	Ala



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      290              295              300
Ser Val Met Thr Asn Met Arg Ala Pro Ser Thr Thr Gly Gly Ile Gly
305              310              315              320
Ile Asn Ser Val Thr Gly Thr Ser Thr Val Asn Asn Val Asn Ile Thr
      325              330              335
Ala Val Gly Ser Phe Asn Ser
      340

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<210> 2861  
 <211> 756  
 <212> DNA  
 <213> Homo sapiens

```

<400> 2861
gctagctcta gctctgcacc agcccaagaa accatctgcc tcgacgactc actagatgaa
60
gacctttctt tccattcacc ttactggat cttgtttctg aagcttttagc gggtatcaac
120
aatgggaaca agggccctcc agttggctca aggataagca tgccaaccac aaagcctcgt
180
ccaggactga gagaagaaaa attagcaagt atcatgagta agctgccact agctactccc
240
aaaaaactag atttactca gactacacat tcttcaagtc ttattgctgg tcacacaggg
300
ccagtaccaa agaaacccca ggatttagct catactggca tctcttcagg ccttattgct
360
ggttcttcca ttcagaaccc taaagtttct ttagaacctt tgccagccag gctacttcaa
420
caaggacttc agaggtcaag ccagattcac acttcttctt cttcacagac ccatgtctcc
480
tcttcttccc aagcccaaat tgctgcctct tctcatgctc tgggaacatc cgaggcccaa
540
gatgcttctt cgtaacaca agtaacaaag gtgcaccagc attcagctgt ccagcagaac
600
tatgtgtctc cattacaggc caccatcagt aaatcccaga ccaaccccggt cgtgaagtta
660
agtaataatc cccaactctc ctgttcctcc tcacttatta agacttcaga taagccactt
720
atgtaccgcc ttcctttatc taccctcttc acgcgt
756

```

<210> 2862  
 <211> 252  
 <212> PRT  
 <213> Homo sapiens

```

<400> 2862
Ala Ser Ser Ser Ser Ala Pro Ala Gln Glu Thr Ile Cys Leu Asp Asp
1          5          10          15
Ser Leu Asp Glu Asp Leu Ser Phe His Ser Pro Ser Leu Asp Leu Val
20          25          30
Ser Glu Ala Leu Ala Val Ile Asn Asn Gly Asn Lys Gly Pro Pro Val
35          40          45
Gly Ser Arg Ile Ser Met Pro Thr Thr Lys Pro Arg Pro Gly Leu Arg

```

50	55	60
Glu Glu Lys Leu Ala Ser Ile Met Ser Lys Leu Pro Leu Ala Thr Pro		
65	70	75
Lys Lys Leu Asp Ser Thr Gln Thr Thr His Ser Ser Ser Leu Ile Ala		80
	85	90
Gly His Thr Gly Pro Val Pro Lys Lys Pro Gln Asp Leu Ala His Thr		95
	100	105
Gly Ile Ser Ser Gly Leu Ile Ala Gly Ser Ser Ile Gln Asn Pro Lys		110
	115	120
Val Ser Leu Glu Pro Leu Pro Ala Arg Leu Leu Gln Gln Gly Leu Gln		125
	130	135
Arg Ser Ser Gln Ile His Thr Ser Ser Ser Ser Gln Thr His Val Ser		140
145	150	155
Ser Ser Ser Gln Ala Gln Ile Ala Ala Ser Ser His Ala Leu Gly Thr		160
	165	170
Ser Glu Ala Gln Asp Ala Ser Ser Leu Thr Gln Val Thr Lys Val His		175
	180	185
Gln His Ser Ala Val Gln Gln Asn Tyr Val Ser Pro Leu Gln Ala Thr		190
	195	200
Ile Ser Lys Ser Gln Thr Asn Pro Val Val Lys Leu Ser Asn Asn Pro		205
	210	215
Gln Leu Ser Cys Ser Ser Ser Leu Ile Lys Thr Ser Asp Lys Pro Leu		220
225	230	235
Met Tyr Arg Leu Pro Leu Ser Thr Pro Phe Thr Arg		240
	245	250

<210> 2863  
 <211> 711  
 <212> DNA  
 <213> Homo sapiens

<400> 2863  
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 60  
 gcgccgagcg gtggcgctcg tgtcgcccc tctcgctcgg gaagaatcgt ttggtctcct  
 120  
 gccgtgcccg gaatcccagt cagaagttcc agcctgccac tggttctctga tgccatgcca  
 180  
 gcaccaactc aactgttttt tctctctcatc cgtaactgtg aactgagcag gatctatggc  
 240  
 actgcatggt actgccacca caaacatctc tggtgttcct catcgtagat tcttcagagt  
 300  
 cgactgagat acacacctca tccagcatat gctacctttt gcaggccaaa ggagaactgg  
 360  
 tggcagtaca cccaaggaag gagatatgct tccacaccac agaaatttta cctcacacct  
 420  
 ccacaagtca atagcatcct taaagctaata gaatacagtt tcaaagtgcc agaatttgac  
 480  
 ggcaaaaatg tcagttctat ccttggattt gacagcaatc agctgcctgc aaatgcaccc  
 540  
 attgaggacc ggagaagtgc agcaacctgc ttgcagacca gagggatgct tttggggggt  
 600  
 tttgatggcc atgcagggtg tgcttggtcc caggcagtca gtgaaagact cttttattat  
 660

attgctgtct ctttggtacc ccatgagact ttgctagaga ttgaaaatgc a  
711

<210> 2864  
<211> 237  
<212> PRT  
<213> Homo sapiens

<400> 2864  
Xaa Arg Arg Arg Ile Ser Met Gln Arg Ala Pro Gly Ala Ala Arg Xaa  
1 5 10 15  
Cys Val Glu Arg Ala Pro Ser Gly Gly Val Val Val Ala Pro Ser Ser  
20 25 30  
Ser Gly Arg Ile Val Trp Ser Pro Ala Val Pro Gly Ile Pro Val Arg  
35 40 45  
Ser Ser Ser Leu Pro Leu Phe Ser Asp Ala Met Pro Ala Pro Thr Gln  
50 55 60  
Leu Phe Phe Pro Leu Ile Arg Asn Cys Glu Leu Ser Arg Ile Tyr Gly  
65 70 75 80  
Thr Ala Cys Tyr Cys His His Lys His Leu Cys Cys Ser Ser Ser Tyr  
85 90 95  
Ile Pro Gln Ser Arg Leu Arg Tyr Thr Pro His Pro Ala Tyr Ala Thr  
100 105 110  
Phe Cys Arg Pro Lys Glu Asn Trp Trp Gln Tyr Thr Gln Gly Arg Arg  
115 120 125  
Tyr Ala Ser Thr Pro Gln Lys Phe Tyr Leu Thr Pro Pro Gln Val Asn  
130 135 140  
Ser Ile Leu Lys Ala Asn Glu Tyr Ser Phe Lys Val Pro Glu Phe Asp  
145 150 155 160  
Gly Lys Asn Val Ser Ser Ile Leu Gly Phe Asp Ser Asn Gln Leu Pro  
165 170 175  
Ala Asn Ala Pro Ile Glu Asp Arg Arg Ser Ala Ala Thr Cys Leu Gln  
180 185 190  
Thr Arg Gly Met Leu Leu Gly Val Phe Asp Gly His Ala Gly Cys Ala  
195 200 205  
Cys Ser Gln Ala Val Ser Glu Arg Leu Phe Tyr Tyr Ile Ala Val Ser  
210 215 220  
Leu Leu Pro His Glu Thr Leu Leu Glu Ile Glu Asn Ala  
225 230 235

<210> 2865  
<211> 585  
<212> DNA  
<213> Homo sapiens

<400> 2865  
nggacccctc caaggatatcc aggttaaccgc cacagtttgg aatagagatg ttaggagaga  
60  
agaagtagta gaagacaaag acagttcttt aaattcttga gaagtatgag ctctgtgtat  
120  
ctgcagtgtg aagttttgat atgtgatagc agtgaccacc agtctcgctg caatcaaggt  
180  
tgtgtctcca gaagcaaacy agacatttct tcatataaat ggaaaacaga ttccatcata  
240

ggaccattc gtctgaaaag ggatcgaagt gcaagtggca attcaggatt tcagcatgaa  
300  
acacatgcgg aagaaactcc aaaccagcct ttcaacagtg tgcattctgtt ttccttcatg  
360  
gttctagctc tgaatgtggt gactgtagcg acaatcacag tgaggcattt tgtaaatacaa  
420  
cgggcagact acaaatacca gaagctgcag aactattaac taacagggtcc aaccctaagt  
480  
gagacatggt tctccaggat gccaaaggaa atgctacctc gtggctacac atattatgaa  
540  
taaattgagga agggcctgaa agtggcacac aggcctgcaa aaaaa  
585

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<210> 2866
<211> 134
<212> PRT
<213> Homo sapiens
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<400> 2866
Glu Arg Arg Ser Ser Arg Arg Gln Arg Gln Phe Phe Lys Phe Leu Arg
 1           5           10           15
Ser Met Ser Ser Val Tyr Leu Gln Cys Lys Val Leu Ile Cys Asp Ser
          20           25           30
Ser Asp His Gln Ser Arg Cys Asn Gln Gly Cys Val Ser Arg Ser Lys
          35           40           45
Arg Asp Ile Ser Ser Tyr Lys Trp Lys Thr Asp Ser Ile Ile Gly Pro
          50           55           60
Ile Arg Leu Lys Arg Asp Arg Ser Ala Ser Gly Asn Ser Gly Phe Gln
65           70           75           80
His Glu Thr His Ala Glu Glu Thr Pro Asn Gln Pro Phe Asn Ser Val
          85           90           95
His Leu Phe Ser Phe Met Val Leu Ala Leu Asn Val Val Thr Val Ala
          100          105          110
Thr Ile Thr Val Arg His Phe Val Asn Gln Arg Ala Asp Tyr Lys Tyr
          115          120          125
Gln Lys Leu Gln Asn Tyr
          130

```

```
<210> 2867
<211> 444
<212> DNA
<213> Homo sapiens
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<400> 2867
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60
ctgtcggccg ccgccatcaa gaggatcgtg gctacagcta aggccagtgg gaagaagctg
120
cagaaggtga ctctgaaggt gtcgccacgg ggaattatcc ttcattccagg ccattcatcca
180
gctcccagac aacctgctg ccactcaagg cttgtggccg cggcacctcg tccatgttgg
240
tgggtgttggc gctgaccgtg gacagcgggg ccttagccgt ctccctctaag tccagcaggt
300
```

tcccagtggc gaccaagctc ttcaaggggg ggggtgcagtc ttggcggggcc cccaggacgt  
 360  
 cccctccctc ttggctggct ttgtccctct tctctttctc ttccttggac acctgccaaa  
 420  
 actcaaaggc gactttgaag gcct  
 444

<210> 2868

<211> 84

<212> PRT

<213> Homo sapiens

<400> 2868

Met	Leu	Phe	Ser	Leu	Lys	Tyr	Leu	Gly	Met	Thr	Leu	Val	Glu	Gln	Pro
1				5				10					15		
Lys	Gly	Glu	Glu	Leu	Ser	Ala	Ala	Ala	Ile	Lys	Arg	Ile	Val	Ala	Thr
		20					25					30			
Ala	Lys	Ala	Ser	Gly	Lys	Lys	Leu	Gln	Lys	Val	Thr	Leu	Lys	Val	Ser
	35					40				45					
Pro	Arg	Gly	Ile	Ile	Leu	His	Pro	Gly	His	His	Pro	Ala	Pro	Arg	Gln
	50					55				60					
His	Cys	Cys	His	Ser	Arg	Leu	Val	Ala	Ala	Ala	Pro	Arg	Pro	Cys	Trp
65					70				75					80	
Trp	Cys	Trp	Arg												

<210> 2869

<211> 5811

<212> DNA

<213> Homo sapiens

<400> 2869

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 cagcaatatg gaccaaacag ccagttcccc acccagccag gccagtaccc taccaccaac  
 120  
 cccccaaggc cactcacctc cccaactac ccaggacaaa ggatgcccg ccaaccagc  
 180  
 tccggacagt acccaccctc cacagtcaac atggggcagt attacaagcc agaacagttt  
 240  
 aatggacaaa ataacacgtt ctcgggaagc agctacagta actacagcca agggaatgtc  
 300  
 aacaggcctc ccaggccggt tcctgtggca aattaccccc actcacctgt tccagggaac  
 360  
 cccacacccc ccatgacccc tgggagcagc atccctccat acctgtcccc cagccaagac  
 420  
 gtcaaaccac ccttcccgcc tgacatcaag ccaaatatga gcgctctgcc accaccccca  
 480  
 gccaaaccac atgacgagct gcggtcaca ttccctgtgc gggatggcgt ggtgctggag  
 540  
 cccttccgcc tggagcacia cctggctgta agcaaccatg tgttccagct gcgagactca  
 600  
 gtctacaaga ccctgataat gaggcctgac ctggagctgc aattcaagtg ctaccaccac  
 660

gaggaccggc agatgaacac caactggccc gcctcgggtgc aggtcagcgt gaacgccacg  
720  
ccgctcacca tcgagcgcg cgacaacaag acctcccaca agcccctgca cctgaagcac  
780  
gtgtgccagc caggccgcaa caccatccag atcacctgca cggcctgctg ctgctccac  
840  
ctcttcgtgc tgcagctagt gcaccggccc tccgtccgct ctgtgctgca aggactcctc  
900  
aagaagcgcc tcctgcccgc agagcactgt atcacgaaaa tcaagcggaa tttcagcagc  
960  
gtggctgcct cctcgggcaa cagaccctc aacggggagg atggggtgga gcagacggcc  
1020  
atcaaggtgt ctctgaagtg ccccatcaca ttccggcgca tccagctgcc tgctcgagga  
1080  
cacgattgca agcatgtgca gtgctttgat ctggagtcac acctgcagct gaattgagag  
1140  
agagggacct ggaggtgtcc tgtgtgcaat aaaaccgctc tgctggaggg cctggaggtg  
1200  
gatcagtaca tgtggggaat cctgaatgcc atccaacact ccgagtttga agaggtcacc  
1260  
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1380  
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1440  
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1500  
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1560  
cacgggcccc ccagctctc ccacccccg gacatgcccc acaacatggc cgccctcgag  
1620  
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1680  
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1740  
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1920  
gaactcaca atcctgacga gtcctgtct tatctggacc ccccgacct gccgagcaat  
1980  
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2040  
ccctccacac tctgcatcct accccacct cccaacacac ttttccacct gggagcctgt  
2100  
gccctcagac cgccccgcac cagagccacg ggctgtgggg cggggagccc tccccgctg  
2160  
cagccctctc agaacagagg ggtagggagg gtgcaccagt gcaccaggaa ggctgtgtgg  
2220  
gtctggagcc cagctccac ctccacccc ttggcttggg cccatgcca gcgcaggcct  
2280

gaagaccacc ctcccgagag gaaccagccc ggtaagaggg cacacgctga tgcggcttcc  
2340  
cggtcctccc gcgtgtgccg attccagatg accttccagt gtccccaagg ttcttccatc  
2400  
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2580  
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2700  
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2760  
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2880  
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2940  
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3000  
caagcaaacc atttctctcc gtctgttctg ttttctctc agtccctctc ctgccacctc  
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tccaagactt ccgtgggaca cccacttccc tctgtcctag ttctctttgt ccaatcagat  
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3180  
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3300  
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3360  
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3480  
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3660  
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3720  
gaaagctgcc attgccccgg ccccttttct tcctttgtcc cgttgtcgag gttttttcaa  
3780  
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<211> 258

<212> PRT

<213> Homo sapiens

<400> 2870

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		20						25					30		
Ser	Lys	Arg	Phe	Lys	Thr	Met	Ser	Pro	Ser	Gln	Met	Ile	Met	Pro	Asn
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			100					105					110		
Ser	His	Pro	Pro	Asp	Met	Pro	Asn	Asn	Met	Ala	Ala	Leu	Glu	Lys	Pro
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Leu	Ser	His	Pro	Met	Gln	Glu	Thr	Met	Pro	His	Ala	Gly	Ser	Ser	Asp
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Gln	Pro	His	Pro	Ser	Ile	Gln	Gln	Gly	Leu	His	Val	Pro	His	Pro	Ser
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Ser	Gln	Ser	Gly	Pro	Pro	Leu	His	His	Ser	Gly	Ala	Pro	Pro	Pro	Pro
				165					170					175	
Pro	Ser	Gln	Pro	Pro	Arg	Gln	Pro	Pro	Gln	Ala	Ala	Pro	Ser	Ser	His
			180					185					190		
Pro	His	Ser	Asp	Leu	Thr	Phe	Asn	Pro	Ser	Ser	Ala	Leu	Glu	Gly	Gln
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Ala	Gly	Ala	Gln	Gly	Ala	Ser	Asp	Met	Pro	Glu	Pro	Ser	Leu	Asp	Leu
	210					215					220				
Leu	Pro	Glu	Leu	Thr	Asn	Pro	Asp	Glu	Leu	Leu	Ser	Tyr	Leu	Asp	Pro
225					230					235					240
Pro	Asp	Leu	Pro	Ser	Asn	Ser	Asn	Asp	Asp	Leu	Leu	Ser	Leu	Phe	Glu
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Asn Asn

<210> 2871

<211> 786

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&lt;213&gt; Homo sapiens

&lt;400&gt; 2871

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786

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&lt;210&gt; 2872

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2872

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Gly Thr Met Thr Arg Cys Ser His Gln Gln Ser Pro Tyr Gln Leu Leu
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Phe Gly Glu Pro Tyr Ile Phe Glu Glu Leu Leu Gly Leu Lys Ile Arg
20           25           30
Ile Ser Pro Asp Ala Phe Phe Gln Ile Asn Thr Ala Gly Ala Glu Met
35           40           45
Leu Tyr Trp Thr Val Gly Glu Leu Thr Gly Val Asn Ser Asp Thr Ile
50           55           60
Leu Leu Asp Ile Cys Cys Gly Thr Gly Val Ile Gly Leu Pro Leu Ala
65           70           75           80
Gln His Thr Ser Arg Val Leu Gly Ile Glu Leu Leu Glu Gln Ala Val
85           90           95
Glu Asp Ala Arg Trp Thr Ala Ala Phe Asn Gly Ile Thr Asn Ser Glu
100          105          110
Phe His Thr Gly Gln Ala Glu Lys Ile Leu Pro Gly Leu Leu Lys Ser
115          120          125
Lys Glu Asp Gly Gln Ser Ile Val Ala Val Val Asn Pro Ala Arg Ala

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<210> 2873  
 <211> 1187  
 <212> DNA  
 <213> Homo sapiens

<400> 2873  
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<210> 2874  
 <211> 248  
 <212> PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2874

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          20           25           30
Lys Leu Lys Ala Ser Ser Arg Thr Ser Ala Leu Leu Ser Gly Phe Ala
          35           40           45
Met Val Ala Met Val Glu Val Gln Leu Asp Ala Asp His Asp Tyr Pro
          50           55           60
Pro Gly Leu Leu Ile Ala Phe Ser Ala Cys Thr Thr Val Leu Val Ala
65           70           75           80
Gly His Leu Phe Ala Leu Met Ile Ser Thr Cys Ile Leu Pro Asn Ile
          85           90           95
Glu Ala Val Ser Asn Cys Thr Ile Ser Thr Arg Lys Glu Ser Pro His
          100          105          110
Glu Arg Met His Arg His Ile Glu Leu Ala Trp Ala Phe Ser Thr Val
          115          120          125
Ile Gly Thr Leu Leu Phe Leu Ala Glu Val Val Leu Leu Cys Trp Val
          130          135          140
Lys Phe Leu Pro Leu Lys Lys Gln Pro Gly Gln Pro Arg Pro Thr Ser
145          150          155          160
Lys Pro Pro Ala Ser Gly Ala Ala Ala Asn Val Ser Thr Ser Gly Ile
          165          170          175
Thr Pro Gly Gln Ala Ala Ala Ile Ala Ser Thr Thr Ile Met Val Pro
          180          185          190
Phe Gly Leu Ile Phe Ile Val Phe Ala Val His Phe Tyr Arg Ser Leu
          195          200          205
Val Ser His Lys Thr Asp Arg Gln Phe Gln Glu Leu Asn Glu Leu Ala
          210          215          220
Glu Phe Ala Arg Leu Gln Asp Gln Leu Asp His Arg Gly Asp His Pro
225          230          235          240
Leu Thr Pro Gly Ser His Tyr Ala
          245

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&lt;210&gt; 2875

&lt;211&gt; 593

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2875

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180
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360

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<210> 2876

<211> 193

<212> PRT

<213> Homo sapiens

<400> 2876

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			20					25					30		
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			35				40					45			
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	50					55					60				
Phe	Thr	Leu	Arg	His	Phe	Ile	Val	Tyr	Pro	Pro	Glu	Ser	Ala	Ile	Gln
65					70				75					80	
Phe	Ser	Tyr	Lys	Asp	Glu	Glu	Asn	Gly	Asn	Arg	Gly	Gly	Lys	Gln	Arg
			85					90					95		
Asn	Arg	Leu	Glu	Pro	Met	Asp	Thr	Ile	Phe	Val	Lys	Gln	Val	Lys	Glu
			100					105					110		
Gly	Gly	Pro	Ala	Phe	Glu	Ala	Gly	Leu	Cys	Thr	Gly	Asp	Arg	Ile	Ile
		115					120					125			
Lys	Val	Asn	Gly	Glu	Ser	Val	Ile	Gly	Lys	Thr	Tyr	Ser	Gln	Val	Ile
		130				135					140				
Ala	Leu	Ile	Gln	Asn	Ser	Asp	Thr	Thr	Leu	Glu	Leu	Ser	Val	Met	Pro
145					150				155					160	
Lys	Asp	Glu	Asp	Ile	Leu	Gln	Val	Val	Ser	Phe	Ile	Tyr	Ser	Tyr	Met
			165					170				175			
Ser	Cys	Phe	Thr	Val	Met	Asn	Val	Arg	Lys	Ile	Phe	Leu	Arg	Trp	Lys
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Tyr

<210> 2877

<211> 1921

<212> DNA

<213> Homo sapiens

<400> 2877

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<210> 2878

<211> 451

<212> PRT

<213> Homo sapiens

<400> 2878

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			20				25					30			
Thr	Glu	Glu	Gly	Lys	Glu	Val	Trp	Asp	Tyr	Val	Thr	Val	Arg	Lys	Asp
			35				40					45			
Ala	Tyr	Met	Phe	Trp	Trp	Leu	Tyr	Tyr	Ala	Thr	Thr	Pro	Ala	Arg	Thr
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Ser	Glu	Leu	Pro	Leu	Val	Met	Trp	Leu	Gln	Gly	Gly	Pro	Gly	Gly	Ser
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Ser	Thr	Gly	Phe	Gly	Asn	Phe	Glu	Glu	Ile	Gly	Pro	Leu	Asp	Ser	Asp
				85					90					95	
Leu	Lys	Pro	Arg	Lys	Thr	Thr	Trp	Leu	Gln	Ala	Ala	Ser	Leu	Leu	Phe
			100					105					110		
Val	Asp	Asn	Pro	Val	Gly	Thr	Gly	Phe	Ser	Tyr	Val	Asn	Gly	Ser	Gly
			115				120					125			
Ala	Tyr	Ala	Lys	Asp	Leu	Ala	Met	Val	Ala	Ser	Asp	Met	Met	Val	Leu
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Leu	Lys	Thr	Phe	Phe	Ser	Cys	His	Lys	Glu	Phe	Gln	Thr	Val	Pro	Phe
145					150					155					160
Tyr	Ile	Phe	Ser	Glu	Ser	Tyr	Gly	Gly	Lys	Met	Ala	Ala	Gly	Ile	Gly
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Ala	Gly	Val	Ala	Leu	Gly	Asp	Ser	Trp	Ile	Ser	Pro	Val	Asp	Ser	Val
	195						200					205			
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			260					265					270		
Thr	Lys	Ser	Thr	Pro	Thr	Ser	Thr	Met	Glu	Ser	Ser	Leu	Glu	Phe	Thr
	275						280					285			
Gln	Ser	His	Leu	Val	Cys	Leu	Cys	Gln	Arg	His	Val	Arg	His	Leu	Gln
	290					295					300				
Arg	Asp	Ala	Leu	Ser	Gln	Leu	Met	Asn	Gly	Pro	Ile	Arg	Lys	Lys	Leu
305					310					315					320
Lys	Ile	Ile	Pro	Glu	Asp	Gln	Ser	Trp	Gly	Gly	Gln	Ala	Thr	Asn	Val

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Phe Val Asn Met Glu Glu Asp Phe Met Lys Pro Val Ile Asp Ile Val					
	340		345		350
Asp Thr Leu Leu Glu Ala Gly Val Asn Val Thr Val Tyr Asn Gly Gln					
	355		360		365
Leu Asp Leu Ile Val Asp Thr Ile Gly Gln Glu Ala Trp Val Arg Lys					
	370		375		380
Leu Lys Trp Pro Glu Leu Ser Arg Phe Asn Gln Leu Lys Trp Lys Ala					
385		390		395	400
Leu Tyr Ser Asp Pro Lys Ser Leu Glu Thr Ser Ala Phe Val Lys Ser					
	405		410		415
Tyr Lys Asn Leu Ala Phe Tyr Trp Ile Leu Lys Ala Gly His Met Val					
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&lt;210&gt; 2879

&lt;211&gt; 1352

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2879

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<210> 2880

<211> 376

<212> PRT

<213> Homo sapiens

<400> 2880

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Gln	Leu	Asp	Pro	His	Lys	Leu	Glu	Val	Gly	Ala	Lys	Leu	Asp	Leu	Phe	195	200	205	
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<211> 96

<212> PRT

<213> Homo sapiens

<400> 2882

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			20					25					30		
Val	His	Pro	Gln	His	Phe	Leu	Arg	Lys	Arg	Thr	Pro	Ala	Gln	Ala	Gly
		35					40					45			
Pro	Ala	Ile	Ser	Pro	Leu	Pro	Thr	Asp	Ser	Gln	Ser	Pro	Leu	Ala	Ser
		50				55					60				
Pro	Leu	Asp	Val	Ser	Gly	Gln	Gly	Ser	Gly	Gly	Cys	Ser	Phe	Asp	Lys
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<211> 516

<212> DNA

<213> Homo sapiens

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<211> 172

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<213> Homo sapiens

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Met	Ser	Pro	Leu	Asp	Val	Leu	Glu	Pro	Glu	Gln	Thr	Phe	Phe	Ser	Ser
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Pro	Cys	Gln	Glu	Glu	His	Gly	His	Pro	Arg	Arg	Ile	Pro	His	Leu	Pro
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Leu	Ser	Pro	Pro	Pro	Glu	His	Pro	Gly	Phe	Asp	Ala	Leu	Asp	Gln	Leu
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<211> 807

<212> DNA

<213> Homo sapiens

<400> 2885

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&lt;210&gt; 2886

&lt;211&gt; 269

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2886

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Gly	Arg	Asp	Ala	Glu	Thr	Leu	Gln	Lys	Gln	Lys	Glu	Thr	Ile	Lys	Ala	35	40	45	
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Lys	Thr	Cys	Lys	Met	Met	Leu	Ala	Thr	Glu	Glu	Thr	Ser	Pro	Asp	Leu	65	70	75	80
Val	Gly	Ile	Lys	Arg	Asp	Leu	Glu	Ala	Leu	Ser	Lys	Gln	Cys	Asn	Lys	85	90	95	
Leu	Leu	Asp	Arg	Ala	Gln	Ala	Arg	Glu	Glu	Gln	Val	Glu	Gly	Thr	Ile	100	105	110	
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&lt;210&gt; 2887

&lt;211&gt; 1945

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2887

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<211> 315

<212> PRT

<213> Homo sapiens

<400> 2888

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			20					25					30		
Thr	Arg	Ser	Met	Leu	Lys	Met	Thr	Thr	Ser	Ile	Asn	Arg	Arg	Ser	Arg
			35				40					45			
Thr	Ser	Thr	Lys	Ser	Thr	Arg	Thr	Ser	Ala	Arg	Pro	Gly	Leu	Thr	Ala
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Met	Thr	Ala	Arg	Ser	Cys	Ser	Gly	Glu	Lys	Gly	Gly	His	Trp	Ala	Pro
				85				90					95		
Arg	Gln	Val	Gly	Val	Tyr	Leu	Leu	Pro	Gly	Arg	Val	Gly	Cys	Val	Ser
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Ser	Arg	Val	Ser	Pro	Ser	Phe	Pro	Gly	Asp	Gly	Leu	Asp	Ser	Gly	Leu
			115				120				125				
Ala	Arg	Arg	Gly	Ser	Ala	Val	Ser	Ala	Leu	Ala	Ser	Gly	Leu	Val	Glu
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Asn	Pro	His	Ile	Phe	Pro	Glu	Gly	Ser	Glu	Pro	Lys	Val	Tyr	Leu	Leu	
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<210> 2889

<211> 614

<212> DNA

<213> Homo sapiens

<400> 2889

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<210> 2890

<211> 204

<212> PRT

<213> Homo sapiens

<400> 2890

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Pro Glu Val	Lys Leu Pro Arg Ala	Pro Glu Val Gln Leu	Lys Ala Thr
35	40	45	
Lys Ala Glu	Gln Ala Glu Gly Met Glu Phe Gly	Phe Lys Met Pro Lys	
50	55	60	
Met Thr Met	Pro Lys Leu Gly Arg Ala Glu Ser	Pro Ser Arg Gly Lys	
65	70	75	80
Pro Gly Glu	Ala Gly Ala Glu Val Ser Gly Lys	Leu Val Thr Leu Pro	
85	90	95	
Cys Leu Gln	Pro Glu Val Asp Gly Glu Ala His Val Gly	Val Pro Ser	
100	105	110	
Leu Thr Leu	Pro Ser Val Glu Leu Asp Leu Pro Gly	Ala Leu Gly Leu	
115	120	125	
Gln Gly Gln	Val Pro Ala Ala Lys Met Gly Lys Gly	Glu Arg Ala Glu	
130	135	140	
Gly Pro Glu	Val Ala Ala Gly Val Arg Glu Val Gly	Phe Arg Val Pro	
145	150	155	160
Ser Val Glu	Ile Val Thr Pro Gln Leu Pro Ala Val	Glu Ile Glu Glu	
165	170	175	
Gly Arg Leu	Glu Met Ile Glu Thr Lys Val Lys Pro Ser	Ser Lys Phe	
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&lt;210&gt; 2891

&lt;211&gt; 565

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2891

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565

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&lt;210&gt; 2892

&lt;211&gt; 90

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2892

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Arg Leu Cys Arg Ala Leu Ser Lys Thr Pro Leu Gln His Gln Leu His
      20             25             30
Ser Thr Ser Tyr Arg Lys Ala Leu Pro Ile Leu Arg Pro Ser Ser Arg
      35             40             45
Arg Glu Ala Gly Pro Leu His His Ile Asp Leu Arg Arg Cys Phe Ser
      50             55             60
Arg Leu Gly Arg Gly Ala Asp Phe Ala Val Cys Ala Lys Glu Pro Val
65             70             75             80
Ser Asp Asn Pro Ile Phe Leu Leu Ile Thr
      85             90

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&lt;210&gt; 2893

&lt;211&gt; 2270

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2893

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<211> 490

<212> PRT

<213> Homo sapiens

<400> 2894

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			20					25					30			
Gln	Val	Ser	Val	Ser	Leu	His	Pro	Gly	Thr	Gly	Leu	Phe	Ser	Pro	Phe	
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Cys	Ser	Val	Pro	Leu	Trp	Cys	Ile	Tyr	Phe	Leu	Ser	Phe	Cys	Ile	Val	
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Leu	Ser	Leu	Pro	Ser	Ala	Ser	Leu	His	Leu	Cys	Leu	Ser	Cys	Leu	His	
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Phe	Leu	Asn	Leu	Asp	Cys	Pro	Cys	Leu	Phe	Leu	Cys	His	Ser	Leu	Ser	
				85					90					95		
Ser	Pro	Ser	Val	Cys	Gly	Ser	Ala	Ser	Leu	Ser	His	Ser	Pro	Tyr	Asn	
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Trp	Pro	Leu	Pro	Ala	Gln	Thr	Phe	Leu	Asp	Glu	Leu	His	Glu	Thr	Gly	
		115						120				125				
Gln	Leu	His	Ser	Met	Ser	Thr	Trp	Met	Glu	Leu	Tyr	Pro	Ala	Val	Ser	
	130					135					140					
Thr	Asp	Val	Arg	Phe	Ala	Asn	Met	Leu	Gly	Gln	Pro	Gly	Ser	Thr	Pro	
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				165					170					175		
Asp	Glu	Lys	Lys	Ile	Ile	Lys	Asp	Ile	Leu	Lys	Asp	Arg	Gly	Phe	Cys	
			180					185				190				
Val	Glu	Val	Asn	Thr	Ala	Phe	Glu	Asp	Phe	Ala	His	Val	Ile	Ser	Phe	
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Asn	Ser	Leu	Leu	Glu	Lys	Ala	Glu	Ala	Arg	Glu	Arg	Glu	Arg	Glu	Lys	
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Glu	Glu	Ala	Arg	Arg	Met	Arg	Arg	Arg	Glu	Ala	Ala	Phe	Arg	Ser	Met	
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Val	Arg	Glu	Arg	Phe	Val	Cys	Asp	Ser	Ala	Phe	Glu	Gln	Ile	Thr	Leu	
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Thr	Glu	Cys	Gln	His	Leu	His	Thr	Lys	Gly	Arg	Lys	His	Gly	Arg	Lys	
305					310					315					320	
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Asp	Ser	Val	Glu	Ser	Gly	Gly	Ala	Ala	Leu	Gly	Gly	Arg	Gly	Ser	Pro	
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Pro	Lys	Lys	Lys	Thr	Lys	Lys	Arg	Arg	His	Lys	Ser	Asn	Ser	Pro	Glu	
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Ser	Glu	Thr	Asp	Pro	Glu	Glu	Lys	Ala	Gly	Lys	Glu	Ser	Asp	Glu	Lys	
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 <212> DNA  
 <213> Homo sapiens

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<400> 2896  
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 20                      25                      30  
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 35                      40                      45  
 Pro Gln Gly Leu Gln Lys Gly Gly Gly Glu Ala Pro Val Leu Leu Leu  
 50                      55                      60  
 Gln Glu Leu Ala Gln Asp Ala Val Ala Pro Ala Val Ala Arg Arg Ser

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Ala	Pro	Ala	Pro	Cys	Ser	Asn	Arg	Leu	Arg	Ser	Pro	Ser	Pro	Ser
				85					90				95	
Leu	Pro	Pro	Asp	Arg	Pro	Arg	Pro	Pro	Ala	Arg	Arg	His	Ser	Phe
			100					105					110	Arg
Gly	Pro	Ala	Leu	Arg	Ser	Gly	Pro	Pro	Leu	Pro	Pro	Pro	Pro	Arg
		115					120					125		Arg
Pro	Leu	Leu	Arg	Pro	Pro	Val	Ala	Ala	Ala	Leu	Pro	Pro	Gln	Pro
	130					135					140			Ala
Pro	Ser	Leu	Pro	Ala	Ser	Arg	Ala	His	Ser	Cys	Pro	Gly	Arg	Pro
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Leu	Gly	Gly	Val	Glu	Gln	Pro	Leu	Glu	Val	Leu	Gly	Asp	Ala	
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&lt;210&gt; 2897

&lt;211&gt; 3184

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2897

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<210> 2898

<211> 933

<212> PRT

<213> Homo sapiens

<400> 2898

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			20					25					30		
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		35					40					45			
Thr	Phe	Ser	Phe	Gln	Ala	Gln	Leu	Cys	Gly	Ser	Lys	Thr	Leu	Leu	Gln
	50					55					60				
Tyr	Leu	Glu	Phe	Ser	Pro	Ile	Asp	Ser	Thr	Val	Asp	Val	Gly	Gln	Ser
65					70				75					80	
Val	His	Ala	Thr	Leu	Ser	Phe	Gln	Pro	Leu	Lys	Lys	Cys	Val	Leu	Thr
			85					90					95		
Asp	Leu	Glu	Leu	Ile	Ile	Lys	Ile	Ser	His	Gly	Pro	Thr	Phe	Met	Cys
		100					105					110			
Asn	Ile	Ser	Gly	Cys	Ala	Val	Ser	Pro	Ala	Ile	His	Phe	Ser	Phe	Thr
	115					120					125				
Ser	Tyr	Asn	Phe	Gly	Thr	Cys	Phe	Ile	Tyr	Gln	Ala	Gly	Met	Pro	Pro
	130				135					140					
Tyr	Lys	Gln	Thr	Leu	Val	Ile	Thr	Asn	Lys	Glu	Glu	Thr	Pro	Met	Ser
145				150					155					160	
Ile	Asp	Cys	Leu	Tyr	Thr	Asn	Thr	Thr	His	Leu	Glu	Val	Asn	Ser	Arg
			165					170					175		
Val	Asp	Val	Val	Lys	Pro	Gly	Asn	Thr	Leu	Glu	Ile	Pro	Ile	Thr	Phe
		180					185					190			
Tyr	Pro	Arg	Glu	Ser	Ile	Asn	Tyr	Gln	Glu	Leu	Ile	Pro	Phe	Glu	Ile
	195					200					205				
Asn	Gly	Leu	Ser	Gln	Gln	Thr	Val	Glu	Ile	Lys	Gly	Lys	Gly	Thr	Glu

210	215	220
Met Lys Ile Leu Val	Leu Asp Pro Ala Asn Arg	Ile Val Lys Leu Gly
225	230	235
Ala Val Leu Pro Gly	Gln Val Val Lys Arg Thr	Val Ser Ile Met Asn
245	250	255
Asn Ser Leu Ala Gln	Leu Thr Phe Asn Gln Ser	Ile Leu Phe Thr Ile
260	265	270
Pro Glu Leu Gln Glu	Pro Lys Val Leu Thr	Leu Ala Pro Phe His Asn
275	280	285
Ile Thr Leu Lys Pro	Lys Glu Val Cys Lys	Leu Glu Val Ile Phe Ala
290	295	300
Pro Lys Lys Arg Val	Pro Pro Phe Ser Glu	Glu Val Phe Met Glu Cys
305	310	315
Met Gly Leu Leu Arg	Pro Leu Phe Leu Leu	Ser Gly Cys Cys Gln Ala
325	330	335
Leu Glu Ile Ser Leu	Asp Gln Glu His Ile	Pro Phe Gly Pro Val Val
340	345	350
Tyr Gln Thr Gln Ala	Thr Arg Arg Ile Leu	Met Leu Asn Thr Gly Asp
355	360	365
Val Gly Ala Arg Phe	Lys Trp Asp Ile Lys	Lys Phe Glu Pro His Phe
370	375	380
Ser Ile Ser Pro Glu	Glu Gly Tyr Ile Thr	Ser Gly Met Glu Val Ser
385	390	395
Phe Glu Val Thr Tyr	His Pro Thr Glu Val	Gly Lys Glu Ser Leu Cys
405	410	415
Lys Asn Ile Leu Cys	Tyr Ile Gln Gly Gly	Ser Pro Leu Ser Leu Thr
420	425	430
Leu Ser Gly Val Cys	Val Gly Pro Pro Ala	Val Lys Glu Val Val Asn
435	440	445
Phe Thr Cys Gln Val	Arg Ser Lys His Thr	Gln Thr Ile Leu Leu Ser
450	455	460
Asn Arg Thr Asn Gln	Thr Trp Asn Leu His	Pro Ile Phe Glu Gly Glu
465	470	475
His Trp Glu Gly Pro	Glu Phe Ile Thr Leu	Glu Ala His Gln Gln Asn
485	490	495
Lys Pro Tyr Glu Ile	Thr Tyr Arg Pro Arg	Thr Met Asn Leu Glu Asn
500	505	510
Arg Lys His Gln Gly	Thr Leu Phe Pro Leu	Pro Asp Gly Thr Gly
515	520	525
Trp Leu Tyr Ala Leu	His Gly Thr Ser Glu	Leu Pro Lys Ala Val Ala
530	535	540
Asn Ile Tyr Arg Glu	Val Pro Cys Lys Thr	Pro Tyr Thr Glu Leu Leu
545	550	555
Pro Ile Thr Asn Trp	Leu Asn Lys Pro Gln	Arg Phe Arg Val Ile Val
565	570	575
Glu Ile Leu Lys Pro	Glu Lys Pro Asp Leu	Ser Ile Thr Met Lys Gly
580	585	590
Leu Asp Tyr Ile Asp	Val Leu Ser Gly Ser	Lys Lys Asp Tyr Lys Leu
595	600	605
Asn Phe Phe Ser His	Lys Glu Gly Thr Tyr	Ala Ala Lys Val Ile Phe
610	615	620
Arg Asn Glu Val Thr	Asn Glu Phe Leu Tyr	Tyr Asn Val Ser Phe Arg
625	630	635
Val Ile Pro Ser Gly	Ile Ile Lys Thr Ile	Glu Met Val Thr Pro Val

[illegible]

<210> 2899

<211> 876

<212> DNA

<213> Homo sapiens

<400> 2899

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 gggtagcatg gacgtggggc aacttctgag ctaccaggag ggtcattgag aggagcagta  
 120  
 gagctgcact gccgaatgtc gtagccacta gccacatagg ctgttgattg cttgaaatgt  
 180  
 gactagtctg aattgagaaa tactcccaac aggggcacaa aacgtccccg ggatgatgag  
 240  
 gaagaagaac tgaagacacg ccgcaagcaa actgggtactc gagaacgcgg ccgctatcgg  
 300

gaagaagaaa tgactgtggt ggaggaagcg gatgatgaca aaaaaaggct gctgcagatt  
 360  
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 420  
 aagaaaatga tcctcacatt tgaaaagaga tcatataaaa accaagaatt gcggattaag  
 480  
 tttccagaca atccagagaa gttcatggaa tccgagctgg acctaaatga catcattcag  
 540  
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 600  
 gtacagtcgc ttctcggctt gctcggacac gataatacag atgtgtccat agctgtggtc  
 660  
 gatttgcttc aggaattaac agatatagac accctccatg agagtgaaga gggagcagaa  
 720  
 gtgctcatcg atgctctggt ggatgggcag gtggtagcac tgctggtaca gaatctggag  
 780  
 cgcttgatg agtctgtgaa agaggaggca gatggcgctc acaacactct ggctattgtg  
 840  
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 876

&lt;210&gt; 2900

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2900

Met	Thr	Val	Val	Glu	Glu	Ala	Asp	Asp	Asp	Lys	Lys	Arg	Leu	Leu	Gln
1				5					10					15	
Ile	Ile	Asp	Arg	Asp	Gly	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Pro	Leu
			20					25					30		
Asp	Glu	Ser	Ser	Val	Lys	Lys	Met	Ile	Leu	Thr	Phe	Glu	Lys	Arg	Ser
		35					40					45			
Tyr	Lys	Asn	Gln	Glu	Leu	Arg	Ile	Lys	Phe	Pro	Asp	Asn	Pro	Glu	Lys
	50					55					60				
Phe	Met	Glu	Ser	Glu	Leu	Asp	Leu	Asn	Asp	Ile	Ile	Gln	Glu	Met	His
65					70				75					80	
Val	Val	Ala	Thr	Met	Pro	Asp	Leu	Tyr	His	Leu	Leu	Val	Glu	Leu	Asn
				85					90					95	
Ala	Val	Gln	Ser	Leu	Leu	Gly	Leu	Leu	Gly	His	Asp	Asn	Thr	Asp	Val
			100					105						110	
Ser	Ile	Ala	Val	Val	Asp	Leu	Leu	Gln	Glu	Leu	Thr	Asp	Ile	Asp	Thr
		115				120						125			
Leu	His	Glu	Ser	Glu	Glu	Gly	Ala	Glu	Val	Leu	Ile	Asp	Ala	Leu	Val
	130					135						140			
Asp	Gly	Gln	Val	Val	Ala	Leu	Leu	Val	Gln	Asn	Leu	Glu	Arg	Leu	Asp
145					150					155				160	
Glu	Ser	Val	Lys	Glu	Glu	Ala	Asp	Gly	Val	His	Asn	Thr	Leu	Ala	Ile
				165				170						175	
Val	Glu	Asn	Met	Ala	Glu	Phe	Arg	Pro	Glu	Met	Cys	Thr			
			180					185							

&lt;210&gt; 2901

&lt;211&gt; 756

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2901

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 60  
 ccgcccgtcc agagcctgaa gggcgaggat gctgaggaat ccttggagga ggaggaggcg  
 120  
 ctggaccctc tgggcattat gcgctccaag aagcccaaga aacatcccaa agtggccgtg  
 180  
 aaagccaagc cctcgccccg gctcaccatc tttgacgagg aggtggaccc tgatgagggg  
 240  
 ctctttggcc cgggcaggaa gctgtctcca caggacccct cggaggacgt gtcacccatg  
 300  
 gacccccctga agctatttga tgatcctgac ctcggcgggg ccatccccct gggtgactcc  
 360  
 ctcttctgtc cgcccgctg tgagagtggg gggcccacac ccagcctcag ccacagggac  
 420  
 gcctccaagg aactgttcag gtaccacctg tccccagcgg cgcttggcca gctctgagag  
 480  
 tgtcctggac agagccaagg gcccggtca ttgcccagtc tcagccccag cctcctctga  
 540  
 ggggaggacc ccaggcctgt gaaaagtaga agcctgtggg tgcacattgg gtgagaggcg  
 600  
 gtgaaggggg ctgaggggga ggnaantcgc ccagggctgc tcagctagtt ccagaaagag  
 660  
 agaactttgt gtgcacaacc agtctttctt ttcacaatca tattttaaca gtttatgtaa  
 720  
 agaataatta aattatataa ttgccagggc aaaaaa  
 756

&lt;210&gt; 2902

&lt;211&gt; 158

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2902

Thr	Arg	Arg	Arg	Gly	Ala	Phe	Asp	Phe	Phe	Glu	Lys	Gln	Asp	Gln	Val
1				5					10					15	
Ala	Glu	Glu	Gly	Pro	Pro	Val	Gln	Ser	Leu	Lys	Gly	Glu	Asp	Ala	Glu
			20					25					30		
Glu	Ser	Leu	Glu	Glu	Glu	Glu	Ala	Leu	Asp	Pro	Leu	Gly	Ile	Met	Arg
		35					40					45			
Ser	Lys	Lys	Pro	Lys	Lys	His	Pro	Lys	Val	Ala	Val	Lys	Ala	Lys	Pro
	50					55					60				
Ser	Pro	Arg	Leu	Thr	Ile	Phe	Asp	Glu	Glu	Val	Asp	Pro	Asp	Glu	Gly
65					70					75				80	
Leu	Phe	Gly	Pro	Gly	Arg	Lys	Leu	Ser	Pro	Gln	Asp	Pro	Ser	Glu	Asp
			85						90					95	
Val	Ser	Ser	Met	Asp	Pro	Leu	Lys	Leu	Phe	Asp	Asp	Pro	Asp	Leu	Gly
			100					105					110		
Gly	Ala	Ile	Pro	Leu	Gly	Asp	Ser	Leu	Leu	Leu	Pro	Ala	Ala	Cys	Glu
		115					120					125			
Ser	Gly	Gly	Pro	Thr	Pro	Ser	Leu	Ser	His	Arg	Asp	Ala	Ser	Lys	Glu

130                      135                      140  
 Leu Phe Arg Tyr His Leu Ser Pro Ala Ala Leu Gly Gln Leu  
 145                      150                      155

<210> 2903  
 <211> 542  
 <212> DNA  
 <213> Homo sapiens

<400> 2903  
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 60  
 accacctatt tctctgggaa ttgtaccatg gaagatgcca aattggccca ggactttctg  
 120  
 gactcacaga acctcagtgc ctacaacacc cggctcttca aagaggtcga tggagaaggg  
 180  
 aagccctact acgaggtgcg gctggcttct gtgcttggtt cagagccttc cctggactct  
 240  
 gaggtgactt ccaagctgaa gagctatgaa ttccggggaa gccctttcca ggtgacctcg  
 300  
 ggggactacg cgcccatcct ccagaagggtg gtggagcagc tggagaaagc caaggcctat  
 360  
 gcagccaaca gccaccaggg gcagatgctg gccagttata tagagagctt caccaggggc  
 420  
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 480  
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 540  
 gt  
 542

<210> 2904  
 <211> 180  
 <212> PRT  
 <213> Homo sapiens

<400> 2904  
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 1                      5                      10                      15  
 Lys Glu Gly Ile Thr Thr Tyr Phe Ser Gly Asn Cys Thr Met Glu Asp  
 20                      25                      30  
 Ala Lys Leu Ala Gln Asp Phe Leu Asp Ser Gln Asn Leu Ser Ala Tyr  
 35                      40                      45  
 Asn Thr Arg Leu Phe Lys Glu Val Asp Gly Glu Gly Lys Pro Tyr Tyr  
 50                      55                      60  
 Glu Val Arg Leu Ala Ser Val Leu Gly Ser Glu Pro Ser Leu Asp Ser  
 65                      70                      75                      80  
 Glu Val Thr Ser Lys Leu Lys Ser Tyr Glu Phe Arg Gly Ser Pro Phe  
 85                      90                      95  
 Gln Val Thr Arg Gly Asp Tyr Ala Pro Ile Leu Gln Lys Val Val Glu  
 100                      105                      110  
 Gln Leu Glu Lys Ala Lys Ala Tyr Ala Ala Asn Ser His Gln Gly Gln  
 115                      120                      125  
 Met Leu Ala Gln Tyr Ile Glu Ser Phe Thr Gln Gly Ser Ile Glu Ala

130	135	140
His Lys Arg Gly Ser Arg Phe Trp Ile Gln Asp Lys Gly Pro His Arg		
145	150	155
Gly Glu Val Arg Arg Gln Leu His Pro Thr Cys Pro Leu Leu Pro Ala		160
	165	170
Pro Pro Ser Arg		175
180		

<210> 2905  
 <211> 814  
 <212> DNA  
 <213> Homo sapiens

<400> 2905  
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 120  
 ggattcctcc tctgcccagg tttctgctgt cccccaaaa gaaagacatg tagctgggca  
 180  
 tggtgtgtaca catctgtggt ccagttact caggaggctg aggcaggagg attgcttgag  
 240  
 ccaggtgtt caaggttgca gtgggctgtg aatgctctac ttactccag cctgagcaac  
 300  
 agagcaagac cccggccctc ttctcgactt tctatccctc ctctcaaca ccctttcctt  
 360  
 ctggaaatgg gcttcggggg gttaacca gcccaggga acttgctgagg cccagcatct  
 420  
 tccgtccgct gcaggaggag cacacgcccc cgcccgggt cagcaagacg cgagaaagcg  
 480  
 gccacgccgg gcgtccggga gctgaggctg gagggcgctt ggcaggcagg gcggggccca  
 540  
 ggcggcgga gtgcttatga ccggcgctgg ggggaacttc tggacgtcaa ggggccacta  
 600  
 taaagcggca cagtcttgag ccttcgctct tcacctaagt cagtgagcgc ccttcgcaaa  
 660  
 gcctctgtgg aggttaaccat tgggggttcg cctccaaatc caggaatgca cctcaaaaat  
 720  
 gtcctacac cgtaagaccg tgctccttcaa tgcaaagggg actgtgcggc gaggcaccga  
 780  
 caagccgtag ccctgagacc actcaaagcc tgca  
 814

<210> 2906  
 <211> 200  
 <212> PRT  
 <213> Homo sapiens

<400> 2906  
 Phe Ser Tyr Pro Ser Phe Val Tyr Leu Gly Thr Phe Thr Leu Val Asp  
 1 5 10 15  
 Asn Arg Ile Pro Val Thr Arg Ser Phe Phe Cys Ile Thr Asn Ser Ala  
 20 25 30  
 Thr Leu Phe Gln Asn Trp Val Ser Gly Phe Leu Leu Cys Pro Gly Phe

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      35              40              45
Cys Cys Pro Pro Lys Arg Lys Thr Cys Ser Trp Ala Trp Trp Tyr Thr
  50              55              60
Ser Val Val Pro Val Thr Gln Glu Ala Glu Ala Gly Gly Leu Leu Glu
  65              70              75              80
Pro Arg Cys Ser Arg Leu Gln Trp Ala Val Asn Ala Leu Leu His Ser
      85              90              95
Ser Leu Ser Asn Arg Ala Arg Pro Arg Pro Ser Ser Arg Leu Ser Ile
      100              105              110
Pro Pro Pro Gln His Pro Phe Leu Leu Glu Met Gly Phe Gly Val Val
      115              120              125
Asn Gln Ala Gln Gly Asn Leu Arg Gly Pro Ala Ser Ser Val Arg Cys
      130              135              140
Arg Arg Ser Thr Arg Pro Arg Pro Gly Ser Ala Arg Arg Glu Lys Ala
  145              150              155              160
Ala Thr Pro Gly Val Arg Glu Leu Arg Leu Glu Gly Ala Trp Gln Ala
      165              170              175
Gly Arg Gly Pro Gly Gly Gly Ser Ala Tyr Asp Arg Arg Trp Gly Glu
      180              185              190
Leu Leu Asp Val Lys Gly Pro Leu
      195              200

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&lt;210&gt; 2907

&lt;211&gt; 379

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2907

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  120
aaacagcatc ttcacttttc ccaggctgct ttccaatttc caacactgtc cccaagatta
  180
caaaggcaaa ggaattcttc ccttaatgtt ggacggtcct gagactgtc caccctgggc
  240
tcattacact gggaccagct ttaagcttcc ctgttcaacg cggagagctc cacageccag
  300
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  360
cctggccgat gccaccggt
  379

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&lt;210&gt; 2908

&lt;211&gt; 113

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2908

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Met Thr Val Ser Asp Arg Pro Ser Ala Gly Cys Asp Leu Pro Lys Leu
  1              5              10              15
Met Thr Ala Ser Leu Asn Gly Trp Val Leu Arg Asn Ser Ile Phe Thr
      20              25              30
Phe Pro Arg Leu Leu Ser Asn Phe Gln His Cys Pro Gln Asp Tyr Lys

```



[illegible]

<210> 2909

<211> 2420

<212> DNA

<213> Homo sapiens

<400> 2909

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180	cattggggccc	ctgtgagcgg	gacgggtggct	gagaccgcct	gctgtggcct	tgcgagttct
240	ctgcactcac	tggcaggggt	ttggtgggaa	acggggaagc	tttggcatgg	ttctgtccag
300	ttgcttataa	tcaagaataa	tgagttttga	ggtttacaaa	gagcagaagt	aacatttata
360	cggtcggcat	ttgacaaaag	attgctgata	atatactcat	tccaggaagt	gtaaaaatgc
420	tttaaaggaa	tgataatttg	tacttactgt	ttatggggac	tagatatatt	agaattatag
480	catcattatg	gggacatagt	gtttccctat	aaattcagaa	attctctggg	tgatgtaaaa
540	tcatacttcc	tggtttttact	taattagtaa	agaaataaat	aaattagagt	aacatttagt
600	caggtagagt	tactcctttt	tccccttctt	tattaataaa	ttttattttt	agcacaatca
660	tttaccctaa	aagagagttt	gagaatgttc	gagaatctct	accactcggg	aaccatgctg
720	gctgttatat	cagaaaaatc	cataaacata	cacagcagcg	agctgttttc	acaagacttc
780	ctgctaataa	acacaacact	ttctcctcca	ctcagatggg	agcctcagat	gccaaaacgc
840	agatgtgcc	actaactata	ggctcgttgc	taagcagaga	aacctatcaa	gtttgtccag
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960	tctgtgctgc	tgtcccctga	ggcaggtcga	agctggtggc	ccttagaggg	caggtaaaat
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1200  
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1260  
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1320  
tgccttgagg ggacaggcac ccaaatgcaa taaataacac caagctcagg acccagccac  
1380  
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1800  
gggcagctcc tcaactggaat caggggtcaa gagcgccagg tctgcctgtg tctgggtctc  
1860  
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1920  
agctggggat ggctccctga gctggggacc tagaagacgc tgctgacaga tgggcccctt  
1980  
catggtgggg cccattcctg aggtaacgtg cagccctgag gctggtccga acgggaggag  
2040  
acttctccag cagcccaggt gccagtccac acagacagga ctggaagccc ctgggcagca  
2100  
ggtcaggtga cccggggagt gcagcctgag cccccaacgg cagcaaactg gaaggctctc  
2160  
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aatatgtaga aaaatagcca  
2420

&lt;210&gt; 2910

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2910

Met Gly Thr Glu Gly Ser Lys Gly Gly Ile Arg Ser Ala Pro Lys Pro

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Pro Cys Thr Thr Ser Asn Ala Gly Val Trp Leu Leu Leu Leu His Arg			
	20	25	30
Thr Glu Pro Pro Val Phe Cys Leu Arg Ala Ser Phe Met Ala Trp Thr			
	35	40	45
Gly Asn Ala Met Cys Ser His Lys Cys Thr Thr Ile Val His Gln His			
	50	55	60
Leu Tyr Asn Ile Lys Gly Val Ile Tyr Lys Ser Thr Ala Ile Val His			
65	70	75	80
Arg Met Val Met Ala Gly Glu Pro Arg Pro Pro Val Leu Cys Ser Phe			
	85	90	95
Ser Thr Gly Glu His Leu Gly Ser Cys His Lys Ala Arg Gly Gly Pro			
	100	105	110
Ser Leu Gly Leu Ser Trp Gly Arg Gln Gln Val Cys Lys Asp Ser Ser			
	115	120	125
Gly Pro Val Leu Thr Gly Ile Arg Gly Gln Glu Arg Gln Val Cys Leu			
	130	135	140
Cys Leu Gly Leu Ile Gly Arg Leu Val			
145	150		

&lt;210&gt; 2911

&lt;211&gt; 1327

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2911

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<210> 2912

<211> 350

<212> PRT

<213> Homo sapiens

<400> 2912

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			20					25					30		
Arg	Ser	Ser	Gly	Gly	Gly	Gly	Trp	Ala	Asp	Pro	Arg	Thr	Cys	Leu	Ser
		35					40					45			
Leu	Leu	Ser	Leu	Gly	Thr	Cys	Leu	Gly	Leu	Ala	Trp	Phe	Val	Phe	Gln
		50				55					60				
Gln	Ser	Glu	Lys	Phe	Ala	Lys	Val	Glu	Asn	Gln	Tyr	Gln	Leu	Leu	Lys
65					70					75				80	
Leu	Glu	Thr	Asn	Glu	Phe	Gln	Gln	Leu	Gln	Ser	Lys	Ile	Ser	Leu	Ile
			85						90					95	
Ser	Glu	Lys	Trp	Gln	Lys	Ser	Glu	Ala	Ile	Met	Glu	Gln	Leu	Lys	Ser
			100					105					110		
Phe	Gln	Ile	Ile	Ala	His	Leu	Lys	Arg	Leu	Gln	Glu	Glu	Ile	Asn	Glu
		115					120					125			
Val	Lys	Thr	Trp	Ser	Asn	Arg	Ile	Thr	Glu	Lys	Gln	Asp	Ile	Leu	Asn
		130				135					140				
Asn	Ser	Leu	Thr	Thr	Leu	Ser	Gln	Asp	Ile	Thr	Lys	Val	Asp	Gln	Ser
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Thr	Thr	Ser	Met	Ala	Lys	Asp	Val	Gly	Leu	Lys	Ile	Thr	Ser	Val	Lys
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Thr	Asp	Ile	Arg	Arg	Ile	Ser	Gly	Leu	Val	Thr	Asp	Val	Ile	Ser	Leu
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Thr	Asp	Ser	Val	Gln	Glu	Leu	Glu	Asn	Lys	Ile	Glu	Lys	Val	Glu	Lys
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Asn	Thr	Val	Lys	Asn	Ile	Gly	Asp	Leu	Leu	Ser	Ser	Ser	Ile	Asp	Arg
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Thr	Ala	Thr	Leu	Arg	Lys	Thr	Ala	Ser	Glu	Asn	Ser	Gln	Arg	Ile	Asn

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225          230          235          240
Ser Val Lys Lys Thr Leu Thr Glu Leu Lys Ser Asp Phe Asp Lys His
          245          250          255
Thr Asp Arg Phe Leu Ser Leu Glu Gly Asp Arg Ala Lys Val Leu Lys
          260          265          270
Thr Val Thr Phe Ala Asn Asp Leu Lys Pro Lys Val Tyr Asn Leu Lys
          275          280          285
Lys Asp Phe Ser Arg Leu Glu Pro Leu Val Asn Asp Leu Thr Leu Arg
          290          295          300
Ile Gly Arg Leu Val Thr Asp Leu Leu Gln Arg Glu Lys Glu Ile Ala
305          310          315          320
Phe Leu Ser Glu Lys Ile Ser Asn Leu Thr Ile Val Gln Ala Glu Ile
          325          330          335
Lys Asp Ile Lys Asp Glu Ile Ala His Ile Ser Asp Met Asn
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&lt;210&gt; 2913

&lt;211&gt; 361

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2913

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240
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360
g
361

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&lt;210&gt; 2914

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2914

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Met Ala Gly Gly Ser Ser Gly Ser Ser Ser Glu Lys Met Ala Arg Tyr
1          5          10          15
Trp Val Met Ile Ser Lys Arg Trp Thr Arg Glu Ala Leu Asp Gly Phe
20          25          30
Cys Asn Met Glu Ile Gly Ile Ile Arg Asn Gly Ser Gln Asp Gly
35          40          45
Pro Glu Pro Ser Ile Ser Gly Leu Lys Lys Leu His Pro Gln Leu Ser
50          55          60
Leu Ser Glu Asp Val His Ala Pro Gln Val Ala Asn Asp Thr Glu Ala
65          70          75          80
Gly Arg Lys Leu Asp Val Gly Pro Gln Leu Leu Asp Gln Leu Ala Gln

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<210> 2915  
 <211> 1782  
 <212> DNA  
 <213> Homo sapiens

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 1320

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 <212> PRT  
 <213> Homo sapiens

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 Ile Gln Glu Val Glu Leu Lys Ala Ser Ala Ala Asp Arg Glu Ile Tyr  
 35 40 45  
 Leu Leu Arg Thr Ser Leu His Arg Glu Arg Glu Gln Ala Gln Gln Leu  
 50 55 60  
 His Gln Leu Leu Ala Leu Lys Glu Gln Glu His Arg Lys Glu Leu Glu  
 65 70 75 80  
 Thr Arg Glu Phe Phe Thr Asp Ala Asp Phe Gln Asp Ala Leu Ala Lys  
 85 90 95  
 Glu Ile Ala Lys Glu Glu Lys Lys His Glu Gln Met Ile Lys Glu Tyr  
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 Gln Glu Lys Ile Asp Val Leu Ser Gln Gln Tyr Met Asp Leu Glu Asn  
 115 120 125  
 Glu Phe Arg Ile Ala Leu Thr Val Glu Ala Arg Arg Phe Gln Asp Val  
 130 135 140  
 Lys Asp Gly Phe Glu Asn Val Ala Thr Glu Leu Ala Lys Ser Lys His  
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 Ala Leu Ile Trp Ala Gln Arg Lys Glu Asn Glu Ser Ser Ser Leu Ile  
 165 170 175  
 Lys Asp Leu Thr Cys Met Val Lys Glu Gln Lys Thr Lys Leu Ala Glu  
 180 185 190  
 Val Ser Lys Leu Lys Gln Glu Thr Ala Ala Asn Leu Gln Asn Gln Ile  
 195 200 205  
 Asn Thr Leu Glu Ile Leu Ile Glu Asp Asp Lys Gln Lys Ser Ile Gln  
 210 215 220  
 Ile Glu Leu Leu Lys His Glu Lys Val Gln Leu Ile Ser Glu Leu Ala  
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<210> 2917

<211> 2636

<212> DNA

<213> Homo sapiens

<400> 2917

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420

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<211> 509

<212> PRT

<213> Homo sapiens

<400> 2918

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			20					25					30		
Met	Asp	Glu	Leu	Val	Pro	Leu	Gly	Glu	Leu	Thr	Lys	His	Ser	Thr	Ser
	35						40					45			
Ala	Val	Asp	Leu	Ser	Thr	Xaa	Phe	Ala	Gln	Ile	Ser	His	Thr	Ala	Arg
	50					55					60				
Gln	Leu	Asp	Trp	Pro	Asp	Pro	Glu	Glu	Ala	Phe	Met	Ile	Thr	Val	Lys
65					70				75					80	
Phe	Val	Glu	Asp	Thr	Cys	Arg	Leu	Ala	Leu	Val	Tyr	Cys	Ser	Leu	Ile
			85					90					95		
Lys	Ala	Arg	Ala	Arg	Glu	Leu	Ser	Ser	Gly	Gln	Lys	Asp	Gln	Gly	Gln
		100					105						110		
Ala	Ala	Asn	Met	Leu	Cys	Val	Val	Val	Asn	Asp	Met	Glu	Gln	Leu	Arg
	115						120					125			
Leu	Val	Ile	Gly	Lys	Leu	Pro	Ala	Gln	Leu	Ala	Trp	Glu	Ala	Leu	Glu
	130					135					140				
Gln	Arg	Val	Gly	Ala	Val	Leu	Glu	Gln	Gly	Gln	Leu	Gln	Asn	Thr	Leu
145					150				155					160	
His	Ala	Gln	Leu	Gln	Ser	Ala	Leu	Ala	Gly	Leu	Gly	His	Glu	Ile	Arg
			165					170					175		
Thr	Gly	Val	Arg	Thr	Leu	Ala	Glu	Gln	Leu	Glu	Val	Gly	Ile	Ala	Lys
	180						185						190		
His	Ile	Gln	Lys	Leu	Val	Gly	Val	Arg	Glu	Ser	Val	Leu	Pro	Glu	Asp
	195					200						205			
Ala	Ile	Leu	Pro	Leu	Met	Lys	Phe	Leu	Glu	Val	Glu	Leu	Cys	Tyr	Met

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245	250	255
Ser Ser Ser Leu Ala	Ser Asn Arg Leu Lys Ile	Ala Leu Gln Asn Leu
260	265	270
Glu Ile Cys Phe His	Ala Glu Gly Cys Gly Leu Pro	Pro Lys Ala Leu
275	280	285
His Thr Ala Thr Phe	Gln Ala Leu Gln Arg Asp	Leu Glu Leu Gln Ala
290	295	300
Ala Ser Ser Arg Glu	Leu Ile Arg Lys Tyr Phe	Cys Ser Arg Ile Gln
305	310	315
Gln Gln Ala Glu Thr	Thr Ser Glu Glu Leu Gly	Ala Val Thr Val Lys
325	330	335
Ala Ser Tyr Arg Ala	Ser Glu Gln Lys Leu Arg	Val Glu Leu Leu Ser
340	345	350
Ala Ser Ser Leu Leu	Pro Leu Asp Ser Asn Gly	Ser Ser Asp Pro Phe
355	360	365
Val Gln Leu Thr Leu	Glu Pro Arg His Glu Phe	Pro Glu Leu Ala Ala
370	375	380
Arg Glu Thr Gln Lys	His Lys Lys Asp Leu His	Pro Leu Phe Asp Glu
385	390	395
Thr Phe Glu Phe Leu	Val Pro Ala Glu Pro Cys	Arg Lys Ala Gly Ala
405	410	415
Cys Leu Leu Leu Thr	Val Leu Asp Tyr Asp Thr	Leu Gly Ala Asp Asp
420	425	430
Leu Glu Gly Glu Ala	Phe Leu Pro Leu Arg Glu	Val Pro Gly Leu Ser
435	440	445
Gly Ser Glu Glu Pro	Gly Glu Val Pro Gln Thr	Arg Leu Pro Leu Thr
450	455	460
Tyr Pro Ala Pro Asn	Gly Asp Pro Ile Leu Gln	Leu Leu Glu Gly Arg
465	470	475
Lys Gly Asp Arg Glu	Ala Gln Val Phe Val Arg	Leu Arg Arg His Arg
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Ala Lys Gln Ala Ser	Gln His Ala Leu Arg	Pro Ala Pro
500	505	

&lt;210&gt; 2919

&lt;211&gt; 455

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2919

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<211> 143

<212> PRT

<213> Homo sapiens

<400> 2920

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		20						25				30			
Arg	Gln	Val	Ser	Ser	Leu	Leu	Thr	Asn	His	Leu	Ala	Arg	Ala	Thr	Glu
		35					40					45			
Cys	Cys	Gly	Asn	Gln	Ala	Ala	Gly	Asn	Asp	Ala	Leu	Gln	Asp	Val	Leu
	50					55				60					
Ser	Leu	Leu	Asn	Asp	Leu	Ser	Arg	Ser	His	Ile	Gly	Lys	Ala	Ile	Leu
65					70					75				80	
Ser	Gln	Pro	Ala	Cys	Val	Ser	Lys	Leu	Leu	Ser	Leu	Leu	Leu	Asp	Gln
			85					90						95	
Arg	Pro	Ser	Pro	Lys	Leu	Val	Leu	Ile	Ile	Leu	Gln	Leu	Cys	Arg	Ala
			100					105					110		
Ala	Leu	Pro	Leu	Met	Ser	Val	Glu	Asp	Cys	Gly	Asn	Val	Glu	Leu	Pro
		115					120					125			
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<210> 2921

<211> 1855

<212> DNA

<213> Homo sapiens

<400> 2921

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1855

&lt;210&gt; 2922

&lt;211&gt; 452

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2922

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Lys	Ile	Val	Arg	Ala	Gln	Gly	Gln	Tyr	Met	Tyr	Asp	Glu	Gln	Gly	Ala		
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Glu	Tyr	Ile	Asp	Cys	Ile	Ser	Asn	Val	Ala	His	Val	Gly	His	Cys	His		
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Pro	Leu	Val	Val	Gln	Ala	Ala	His	Glu	Gln	Asn	Gln	Val	Leu	Asn	Thr		
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Cys	Val	Ala	Ala	Thr	Gln	Pro	Val	Ala	Arg	Ala	Phe	Glu	Ala	Thr	Gly		
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Val	Glu	Tyr	Phe	Asn	Thr	Phe	Gly	Gly	Ser	Pro	Val	Ser	Cys	Ala	Val		
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Arg Arg Thr Gly Ser Thr Ala Ala Pro Ala Ser Ala Pro Pro Ile Ala  
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<210> 2926

<211> 305

<212> PRT

<213> Homo sapiens

<400> 2926

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2156

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<400> 2928

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          35          40          45
Glu Ala Ile Met Ala Gln Gln Asp Arg Ile Gln Gln Glu Ile Ala Val
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Gln Asn Pro Leu Val Ser Glu Arg Leu Glu Leu Ser Val Leu Tyr Lys
65          70          75          80
Glu Tyr Ala Glu Asp Asp Asn Ile Tyr Gln Gln Lys Ile Lys Asp Leu
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His Lys Lys Tyr Ser Tyr Ile Arg Lys Thr Arg Pro Asp Gly Asn Cys
          100          105          110
Phe Tyr Arg Ala Phe Gly Phe Ser His Leu Glu Ala Leu Leu Asp Asp
          115          120          125
Ser Lys Glu Leu Gln Arg Phe Lys Ala Val Ser Ala Lys Ser Lys Glu
          130          135          140
Asp Leu Val Ser Gln Gly Phe Thr Glu Phe Thr Ile Glu Asp Phe His
          145          150          155          160
Asn Thr Phe Met Asp Leu Ile Glu Gln Val Glu Lys Gln Thr Ser Val
          165          170          175
Ala Asp Leu Leu Ala Ser Phe Asn Asp Gln Ser Thr Ser Asp Tyr Leu
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Val Val Tyr Leu Arg Leu Leu Thr Ser Gly Tyr Leu Gln Arg Glu Ser
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          225          230          235          240
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 <212> PRT  
 <213> Homo sapiens

<400> 2930

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Lys Pro Lys Met Leu Asp Lys Lys Lys Pro Thr Pro Ile Ile Pro Glu
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Lys Thr Val Arg Val Val Ile Asn Phe Lys Lys Thr Gln Lys Thr Ile
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Val Arg Val Ser Pro His Ala Ser Leu Gln Glu Leu Ala Pro Ile Ile
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Cys Ser Lys Cys Glu Phe Asp Pro Leu His Thr Leu Leu Leu Lys Asp
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Tyr Gln Ser Gln Glu Pro Leu Asp Leu Thr Lys Ser Leu Asn Asp Leu
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Gly Leu Arg Glu Leu Tyr Ala Met Asp Val Asn Arg Glu Ser Cys Gln
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Ala Pro Lys Lys Arg Arg Ala Pro Leu Pro Pro Met Pro Ala Ser Gln
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Ile Val Lys Ser Met Ser Val Asp Glu Thr Asp Lys Ser Pro Cys Glu
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&lt;210&gt; 2931

&lt;211&gt; 625

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2931

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<211> 90

<212> PRT

<213> Homo sapiens

<400> 2932

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Asp	Lys	Pro	Asp	Ser	Val	Leu	Thr	His	His	Val	Pro	Arg	Asn	Leu	Gln
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Lys	Leu	Cys	Lys	Glu	Arg	Ala	Gln	Lys	Leu	Cys	Arg	Asn	Ser	Thr	Arg
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<210> 2933

<211> 688

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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			20					25					30		
Ser	Gly	Glu	Asp	Asn	Lys	Trp	Glu	Arg	Glu	Ser	Gln	Glu	Thr	Thr	Arg
		35					40					45			
Glu	Leu	Leu	Lys	Val	Lys	Asp	Arg	Leu	Ile	Glu	Val	Glu	Arg	Asn	Asn
	50					55					60				
Ala	Thr	Leu	Gln	Ala	Glu	Lys	Gln	Ala	Leu	Lys	Thr	Gln	Leu	Lys	Gln
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Leu	Glu	Thr	Gln	Asn	Asn	Asn	Leu	Gln	Ala	Gln	Ile	Leu	Ala	Leu	Gln
			85					90					95		
Arg	Gln	Thr	Val	Ser	Leu	Gln	Glu	Gln	Asn	Thr	Thr	Leu	Gln	Thr	Gln
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Ser	Leu	Met	Asn	Gln	Asn	Ala	Gln	Leu	Leu	Ile	Gln	Gln	Ser	Ser	Leu
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Glu	Arg	Gln	Ala	Ser	Glu	Tyr	Glu	Ser	Leu	Ile	Ser	Lys	His	Gly	Thr
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Asp	Arg	Tyr	Asn	Gln	Leu	Leu	Lys	Gln	Lys	Gly	Gln	Leu	Glu	Asp	Leu
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<212> DNA  
<213> Homo sapiens

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<210> 2936  
<211> 109  
<212> PRT  
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Val	Lys	Val	Lys	Met	Glu	Lys	Lys	Ser	Thr	Pro	Ser	Arg	Gly	Ser	Ser
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Ser	Lys	Ser	Ser	Ser	Arg	Gln	Leu	Ser	Glu	Ser	Phe	Lys	Ser	Lys	Glu
		50				55					60				
Phe	Val	Ser	Ser	Asp	Glu	Ser	Ser	Ser	Gly	Glu	Asn	Lys	Ser	Lys	Lys
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Lys	Arg	Arg	Arg	Ser	Glu	Asp	Ser	Glu	Glu	Glu	Glu	Leu	Ala	Ser	Thr
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Pro	Pro	Ser	Ser	Glu	Asp	Ser	Ala	Ser	Gly	Ser	Asp	Glu			
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&lt;210&gt; 2937

&lt;211&gt; 749

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2937

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&lt;210&gt; 2938

&lt;211&gt; 249

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2938

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Leu Glu Phe Ile Ser Asp Gly Ala Leu Ala Ile Glu Val Trp Gly His			
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Ile Glu Met Trp Ile Ser Ile Leu Glu Leu Asn Glu Leu Gly Glu Tyr			
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Ala Ala Val Glu Leu His Gln Ala Lys Asp Val Asn Thr Gly Gly Ile			
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Phe Gln Leu Arg Gln Gly His Ser Arg Arg Val Gln Val Thr Val Lys			
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Pro Val Gln His Ser Gly Thr Leu Pro Leu Met Val Glu Ala Ile Leu			
195	200	205	
Ser Val Ser Ile Gly Cys Val Thr Ala Arg Ser Thr Lys Leu Gln Arg			
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&lt;210&gt; 2939

&lt;211&gt; 2405

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2939

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<210> 2940

<211> 357

<212> PRT

<213> Homo sapiens

<400> 2940

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Pro	Ala	Ile	Leu	Thr	Tyr	His	Asp	Val	Gly	Leu	Asn	Tyr	Lys	Ser	Cys
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Val	Phe	Pro	Leu	Gly	Tyr	Gln	Tyr	Pro	Ser	Leu	Asp	Gln	Leu	Ala	Asp
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Met	Ile	Pro	Cys	Val	Leu	Gln	Tyr	Leu	Asn	Phe	Ser	Thr	Ile	Ile	Gly
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Val	Gly	Val	Gly	Ala	Gly	Ala	Tyr	Ile	Leu	Ala	Arg	Tyr	Ala	Leu	Asn
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His	Pro	Asp	Thr	Val	Glu	Gly	Leu	Val	Leu	Ile	Asn	Ile	Asp	Pro	Asn
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Ala	Lys	Gly	Trp	Met	Asp	Trp	Ala	Ala	His	Lys	Leu	Thr	Gly	Leu	Thr
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Ser	Ser	Ile	Pro	Glu	Met	Ile	Leu	Gly	His	Leu	Phe	Ser	Gln	Glu	Glu
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Leu	Ser	Gly	Asn	Ser	Glu	Leu	Ile	Gln	Lys	Tyr	Arg	Asn	Ile	Ile	Thr
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Asn	Arg	Arg	Asp	Leu	Asn	Phe	Glu	Arg	Gly	Gly	Asp	Ile	Thr	Leu	Arg
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Cys	Pro	Val	Met	Leu	Val	Val	Gly	Asp	Gln	Ala	Pro	His	Glu	Asp	Ala
				245					250					255	
Val	Val	Glu	Cys	Asn	Ser	Lys	Leu	Asp	Pro	Thr	Gln	Thr	Ser	Phe	Leu
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305	310	315
Ser Ala Ala Ser Val Asp Gly Asn Arg Ser Arg Ser Arg Thr Leu Ser		
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 <212> DNA  
 <213> Homo sapiens

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&lt;400&gt; 2942

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 Gly Arg Gly His Asp His Leu Ala Gly Ala Ser Pro Thr Ala Arg Gln  
 35 40 45  
 His Leu Phe Lys Gln Gly Gln Leu Ser Ala Gln Gly Gly Ala Gln Pro  
 50 55 60  
 Ser Val Glu Ala Pro Ala Ala Pro Arg Pro Thr Ala Thr Gln Leu Thr  
 65 70 75 80  
 Arg Asp Leu Leu Arg Ser Arg Gly Ile Ala Gly Leu Tyr Lys Gly Leu  
 85 90 95  
 Gly Ala Thr Leu Leu Arg Asp Val Pro Phe Ser Val Val Tyr Phe Pro  
 100 105 110  
 Leu Phe Ala Asn Leu Asn Gln Leu Gly Arg Pro Ala Ser Glu Glu Lys  
 115 120 125  
 Ser Pro Phe Tyr Val Ser Phe Leu Ala Gly Cys Val Ala Gly Ser Ala  
 130 135 140  
 Ala Ala Val Ala Val Asn Pro Cys Asp Val Val Lys Thr Arg Leu Gln  
 145 150 155 160  
 Ser Leu Gln Arg Gly Val Asn Glu Asp Thr Tyr Ser Gly Ile Leu Asp  
 165 170 175  
 Cys Ala Arg Lys Ile Leu Arg His Glu Gly Pro Ser Ala Phe Leu Lys  
 180 185 190  
 Gly Ala Tyr Cys Arg Ala Leu Val Ile Ala Pro Leu Phe Gly Ile Ala  
 195 200 205  
 Gln Val Val Tyr Phe Leu Gly Ile Ala Glu Ser Leu Leu Gly Leu Leu  
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 Gln Asp Pro Gln Ala  
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&lt;210&gt; 2943

&lt;211&gt; 1501

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2943

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<210> 2944

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2944

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			20					25					30		
Lys	Lys	Ile	Ser	Arg	Leu	Asp	Ala	Glu	Leu	Val	Lys	Tyr	Lys	Asp	Gln
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Ile	Lys	Lys	Met	Arg	Glu	Gly	Pro	Ala	Lys	Asn	Met	Val	Lys	Gln	Lys
	50					55				60					
Ala	Leu	Arg	Val	Leu	Lys	Gln	Lys	Arg	Met	Tyr	Glu	Gln	Gln	Arg	Asp
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<210> 2946

<211> 463

<212> PRT

<213> Homo sapiens

<400> 2946

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			20					25					30		
Lys	Arg	Thr	Thr	Pro	Leu	Gln	Thr	His	Ser	Ile	Ile	Ile	Ser	Asp	Gln
		35					40					45			
Val	Pro	Ser	Asp	Gln	Asp	Ala	His	Gln	Tyr	Leu	Arg	Leu	Arg	Asp	Gln
	50					55				60					
Ser	Glu	Ala	Thr	Gln	Val	Met	Ala	Glu	Pro	Gly	Glu	Gly	Gly	Ser	Glu
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Thr	Val	Ala	Leu	Pro	Pro	Pro	Pro	Pro	Ser	Glu	Glu	Gly	Gly	Val	Pro
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Gln	Asp	Ala	Ala	Gly	Arg	Gly	Gly	Thr	Pro	Gln	Ile	Arg	Val	Val	Gly
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Gly	Arg	Gly	His	Val	Ala	Ile	Lys	Ala	Gly	Gln	Glu	Glu	Gly	Gln	Pro
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Ala	Glu	Glu	Val	Lys	Thr	Gly	Lys	Cys	Ala	Thr	Val	Ser	Ala	Ala	Val
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Ala	Glu	Arg	Glu	Ser	Ala	Glu	Val	Val	Val	Lys	Glu	Gly	Leu	Ala	Glu
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Lys	Glu	Val	Met	Glu	Glu	Gln	Met	Glu	Val	Glu	Glu	Gln	Pro	Pro	Glu
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225					230				235						240
Arg	Glu	Glu	Glu	Gly	Pro	Trp	Pro	Leu	His	Glu	Ala	Leu	Arg	Met	Asp
				245				250					255		
Pro	Leu	Glu	Ala	Ile	Gln	Leu	Glu	Leu	Asp	Thr	Val	Asn	Ala	Gln	Ala
			260					265					270		
Asp	Arg	Ala	Phe	Gln	Gln	Leu	Glu	His	Lys	Phe	Gly	Arg	Met	Arg	Arg
	275					280						285			
His	Tyr	Leu	Glu	Arg	Arg	Asn	Tyr	Ile	Ile	Gln	Asn	Ile	Pro	Gly	Phe
	290					295					300				
Trp	Met	Thr	Ala	Phe	Arg	Asn	His	Pro	Gln	Leu	Ser	Ala	Met	Ile	Arg
305					310				315						320
Gly	Gln	Asp	Ala	Glu	Met	Leu	Arg	Tyr	Ile	Thr	Asn	Leu	Glu	Val	Lys
				325					330					335	
Glu	Leu	Arg	His	Pro	Arg	Thr	Gly	Cys	Lys	Phe	Lys	Phe	Phe	Phe	Arg
			340					345					350		
Arg	Asn	Pro	Tyr	Phe	Arg	Asn	Lys	Leu	Ile	Val	Lys	Glu	Tyr	Glu	Val
	355						360					365			
Arg	Ser	Ser	Gly	Arg	Val	Val	Ser	Leu	Ser	Thr	Pro	Ile	Ile	Trp	Arg
	370					375					380				
Arg	Gly	His	Glu	Pro	Gln	Ser	Phe	Ile	Arg	Arg	Asn	Gln	Asp	Leu	Ile
385					390				395						400
Cys	Ser	Phe	Phe	Thr	Trp	Phe	Ser	Asp	His	Ser	Leu	Pro	Glu	Ser	Asp
				405				410						415	
Lys	Ile	Ala	Glu	Ile	Ile	Lys	Glu	Asp	Leu	Trp	Pro	Asn	Pro	Leu	Gln
			420					425					430		
Tyr	Tyr	Leu	Leu	Arg	Glu	Gly	Val	Arg	Arg	Ala	Arg	Arg	Arg	Pro	Leu
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&lt;210&gt; 2947

&lt;211&gt; 997

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2947

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&lt;210&gt; 2948

&lt;211&gt; 332

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2948

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Lys	Phe	Arg	His	Thr	Glu	Ala	Arg	Pro	Pro	Arg	Arg	Glu	Ser	Trp	Ile
			20					25					30		
Ser	Asp	Ile	Arg	Ala	Gly	Thr	Ala	Pro	Ser	Cys	Arg	Asn	His	Ile	Lys
		35					40					45			
Ser	Ser	Cys	Ser	Leu	Ile	Ala	Phe	Asn	Ser	Asp	Arg	Pro	Gly	Val	Leu
	50					55					60				
Gly	Ile	Val	Pro	Leu	Gln	Gly	Gln	Gly	Glu	Asp	Lys	Arg	Arg	Val	Ala
65					70					75				80	
His	Leu	Gly	Cys	His	Ser	Asp	Leu	Val	Thr	Asp	Leu	Asp	Phe	Ser	Pro
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			100					105					110		
Leu	Trp	Arg	Leu	Pro	Gly	Pro	Gly	Gln	Ala	Leu	Pro	Ser	Ala	Pro	Gly
		115					120					125			
Val	Val	Leu	Gly	Pro	Glu	Asp	Leu	Pro	Val	Glu	Val	Leu	Gln	Phe	His
	130					135					140				
Pro	Thr	Ser	Asp	Gly	Ile	Leu	Val	Ser	Ala	Ala	Gly	Thr	Thr	Val	Lys
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Val	Trp	Asp	Ala	Ala	Lys	Gln	Gln	Pro	Leu	Thr	Glu	Leu	Ala	Ala	His



				165				170				175			
Gly	Asp	Leu	Val	Gln	Ser	Ala	Val	Trp	Ser	Arg	Asp	Gly	Ala	Leu	Val
180				185				190							
Gly	Thr	Ala	Cys	Lys	Asp	Lys	Gln	Leu	Gln	Ile	Phe	Asp	Pro	Arg	Thr
195				200				205							
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210				215				220							
Ser	Arg	Leu	Ala	Trp	Met	Gly	Thr	Trp	Glu	His	Leu	Val	Ser	Thr	Gly
225				230				235				240			
Phe	Asn	Gln	Met	Arg	Glu	Arg	Glu	Val	Lys	Leu	Trp	Asp	Thr	Arg	Phe
245				250				255							
Phe	Ser	Ser	Ala	Leu	Ala	Ser	Leu	Thr	Leu	Asp	Thr	Ser	Leu	Gly	Cys
260				265				270							
Leu	Val	Pro	Leu	Leu	Asp	Pro	Asp	Ser	Gly	Leu	Leu	Val	Leu	Ala	Gly
275				280				285							
Lys	Gly	Glu	Arg	Gln	Leu	Tyr	Cys	Tyr	Glu	Val	Val	Pro	Gln	Gln	Pro
290				295				300							
Ala	Leu	Ser	Pro	Val	Thr	Gln	Cys	Val	Leu	Glu	Ser	Val	Leu	Arg	Gly
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<211> 880

<212> DNA

<213> Homo sapiens

<400> 2949

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540	tttgcgagaa	cgagttttac	ctgaacatga	cttcttttga	cttggagggtg
600	gagcagggtcg	cacaactatc	agatatttcg	gctctgcac	aactatagct
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<210> 2950

<211> 279

<212> PRT

<213> Homo sapiens

<400> 2950

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Leu	Cys	Gly	Ser	Ile	Thr	Leu	Ala	Leu	Gly	Asn	Ala	Gln	Lys	Leu	Pro
			20					25					30		
Lys	Gly	Lys	Arg	Pro	Asn	Leu	Lys	Val	His	Ile	Asn	Thr	Thr	Ser	Asp
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Ser	Ile	Leu	Leu	Lys	Phe	Leu	Arg	Pro	Ser	Pro	Asn	Val	Lys	Leu	Glu
	50					55					60				
Gly	Leu	Leu	Leu	Gly	Tyr	Gly	Ser	Asn	Val	Ser	Pro	Asn	Gln	Tyr	Phe
65					70					75					80
Pro	Leu	Pro	Ala	Glu	Gly	Lys	Phe	Thr	Glu	Ala	Ile	Val	Asp	Ala	Glu
				85					90					95	
Pro	Lys	Tyr	Leu	Ile	Val	Val	Arg	Pro	Ala	Pro	Pro	Pro	Ser	Gln	Lys
			100					105					110		
Lys	Ser	Cys	Ser	Gly	Lys	Thr	Arg	Ser	Arg	Lys	Pro	Leu	Gln	Leu	Val
		115					120					125			
Val	Gly	Thr	Leu	Thr	Pro	Ser	Ser	Val	Phe	Leu	Ser	Trp	Gly	Phe	Leu
	130						135					140			
Ile	Asn	Pro	His	His	Asp	Trp	Thr	Leu	Pro	Ser	His	Cys	Pro	Asn	Asp
145					150					155					160
Arg	Phe	Tyr	Thr	Ile	Arg	Tyr	Arg	Glu	Lys	Asp	Lys	Glu	Lys	Lys	Trp
				165					170					175	
Ile	Phe	Gln	Ile	Cys	Pro	Ala	Pro	Glu	Thr	Ile	Val	Glu	Asn	Leu	Lys
			180					185					190		
Pro	Asn	Thr	Val	Tyr	Glu	Phe	Gly	Val	Lys	Asp	Asn	Val	Glu	Gly	Gly
		195					200					205			
Ile	Trp	Ser	Lys	Ile	Phe	Asn	His	Lys	Thr	Val	Val	Gly	Ser	Lys	Lys
	210					215					220				
Val	Asn	Gly	Lys	Ile	Gln	Ser	Thr	Tyr	Asp	Gln	Asp	His	Thr	Val	Pro
225					230					235					240
Ala	Tyr	Val	Pro	Arg	Lys	Leu	Ile	Pro	Ile	Thr	Ile	Ile	Lys	Gln	Val
				245					250					255	
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<210> 2951

<211> 3478

<212> DNA

<213> Homo sapiens

<400> 2951

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<210> 2952

<211> 493

<212> PRT

<213> Homo sapiens

<400> 2952

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Gly	Ser	Pro	Arg	Glu	Phe	Ile	Tyr	Leu	Asn	Arg	Tyr	Lys	Arg	Ala	Gly	35	40	45	
Glu	Ser	Gln	Asp	Lys	Cys	Thr	Tyr	Thr	Phe	Ile	Val	Pro	Gln	Gln	Arg	50	55	60	
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Glu	Asn	Arg	Val	His	Lys	Gln	Glu	Leu	Glu	Leu	Leu	Asn	Asn	Glu	Leu	85	90	95	
Leu	Lys	Gln	Lys	Arg	Gln	Ile	Glu	Thr	Leu	Gln	Gln	Leu	Val	Glu	Val	100	105	110	
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Asn	Met	Asn	Ser	Arg	Val	Thr	Gln	Leu	Tyr	Met	Gln	Leu	Leu	His	Glu	130	135	140	
Ile	Ile	Arg	Lys	Arg	Asp	Asn	Ala	Leu	Glu	Leu	Ser	Gln	Leu	Glu	Asn	145	150	155	160
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Lys	Asp	Leu	Glu	His	Lys	Phe	Gln	His	Leu	Ala	Met	Leu	Ala	His	Asn	180	185	190	
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Ser	Ala	Arg	Pro	Val	Pro	Gln	Pro	Pro	Pro	Ala	Ala	Pro	Pro	Arg	Val	210	215	220	
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Gly	Val	Tyr	Trp	Ala	Glu	Phe	Arg	Gly	Gly	Ser	Tyr	Ser	Leu	Lys
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Val	Val	Met	Met	Ile	Arg	Pro	Asn	Pro	Asn	Thr	Phe	His		
			485					490						

&lt;210&gt; 2953

&lt;211&gt; 1377

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2953

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<211> 181

<212> PRT

<213> Homo sapiens

<400> 2954

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 Ile Asn Ser Tyr Phe Pro Ile Ser His Tyr Lys Gly His Thr Val Leu  
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<211> 1047

<212> PRT

<213> Homo sapiens

<400> 2958

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		675					680					685				
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Lys	His	Ala	Leu	Phe	Gln	Pro	Cys	Asp	Gly	Glu	Met	Ile	Ile	Val	Leu	
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Glu	Arg	Glu	Met	Arg	His	Lys	Leu	Lys	Thr	Ala	Phe	Lys	Asn	Phe	Ile	
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Lys Glu Ser Leu Gly Ser Glu Glu Glu Ser Gly Lys Asp Trp Asp Glu		
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<212> PRT

<213> Homo sapiens

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&lt;211&gt; 386

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2966

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&lt;210&gt; 2972

&lt;211&gt; 632

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2972

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<212> DNA

<213> Homo sapiens

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<210> 2974

<211> 117

<212> PRT

<213> Homo sapiens

<400> 2974

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			20					25					30		
Pro	Ala	Val	Leu	Glu	Ser	Ala	Val	Val	Ser	Ser	Pro	Asp	Pro	Ile	Arg
			35					40				45			
Gly	Glu	Val	Val	Lys	Ala	Phe	Ile	Val	Leu	Thr	Pro	Ala	Tyr	Ser	Ser
			50				55				60				
His	Asp	Pro	Glu	Ala	Leu	Thr	Arg	Glu	Leu	Gln	Glu	His	Val	Lys	Arg
65					70					75				80	
Val	Thr	Ala	Pro	Tyr	Lys	Thr	Pro	Arg	Lys	Val	Ala	Phe	Val	Ser	Glu
				85					90					95	
Leu	Pro	Lys	Thr	Val	Ser	Gly	Lys	Ile	Gln	Arg	Ser	Lys	Leu	Arg	Ser
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Gln	Glu	Trp	Gly	Lys											
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<210> 2975

<211> 1425

<212> DNA

<213> Homo sapiens

<400> 2975

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 1080  
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 1200  
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 1260  
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 1320  
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 1425

<210> 2976

<211> 328

<212> PRT

<213> Homo sapiens

<400> 2976

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		20						25				30			
Thr	Leu	Arg	Trp	Glu	Glu	Thr	Arg	Thr	Pro	Glu	Ser	Gln	Pro	Asp	Thr
		35				40					45				
Pro	Pro	Gly	Thr	Pro	Leu	Val	Ser	Gln	Asp	Glu	Lys	Arg	Asp	Ala	Glu
	50					55				60					
Leu	Pro	Lys	Lys	Arg	Met	Gly	Lys	Ser	Asn	Pro	Gly	Trp	Glu	Asn	Leu
65				70				75					80		
Glu	Lys	Leu	Leu	Val	Phe	Thr	Ala	Ala	Gly	Val	Lys	Pro	Gly	Xaa	Lys

[illegible]

<210> 2977

<211> 1420

&lt;212&gt; DNA

<213> Homo sapiens

<400> 2977

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120  
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240  
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480

cgtgcctcg ccaaagccta tgttcgaggg tctgggaccc ggcttcgtga agcagccagt  
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 1420

&lt;210&gt; 2978

&lt;211&gt; 369

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2978

Xaa	Ser	Asn	Ile	His	Ala	Glu	Tyr	Arg	Met	Val	Val	Gly	Gly	Ala	Gln
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Ala	Gly	Asp	Ala	Gly	Thr	Tyr	His	Cys	Thr	Ala	Ala	Glu	Trp	Ile	Gln
			20					25					30		
Asp	Pro	Asp	Gly	Ser	Trp	Ala	Gln	Ile	Ala	Glu	Lys	Arg	Ala	Val	Leu
			35				40					45			
Ala	His	Val	Asp	Val	Gln	Thr	Leu	Ser	Ser	Gln	Leu	Ala	Val	Thr	Val
			50			55					60				
Gly	Pro	Gly	Glu	Arg	Arg	Ile	Gly	Pro	Gly	Glu	Pro	Leu	Glu	Leu	Leu
65				70						75				80	
Cys	Asn	Val	Ser	Gly	Ala	Leu	Pro	Pro	Ala	Gly	Arg	His	Ala	Ala	Tyr
				85					90					95	
Ser	Val	Gly	Trp	Glu	Met	Ala	Pro	Ala	Gly	Ala	Pro	Gly	Pro	Gly	Arg
			100					105					110		
Leu	Val	Ala	Gln	Leu	Asp	Thr	Glu	Gly	Val	Gly	Ser	Leu	Xaa	Ala	Leu

115	120	125																	
Ala Met Arg Ala Asp Xaa Ile Ala Met Glu Lys Val Ala Ser Arg Thr																			
130	135	140																	
Tyr Arg Leu Arg Leu Glu Ala Ala Arg Pro Gly Asp Ala Gly Thr Tyr																			
145	150	155																	
Arg Cys Leu Ala Lys Ala Tyr Val Arg Gly Ser Gly Thr Arg Leu Arg																			
165	170	175																	
Glu Ala Ala Ser Ala Arg Ser Arg Pro Leu Pro Val His Val Arg Glu																			
180	185	190																	
Glu Gly Val Val Leu Glu Ala Val Ala Trp Leu Ala Gly Gly Thr Val																			
195	200	205																	
Tyr Arg Gly Glu Thr Ala Ser Leu Leu Cys Asn Ile Ser Val Arg Gly																			
210	215	220																	
Gly Pro Pro Gly Leu Arg Leu Ala Ala Ser Trp Trp Val Glu Arg Pro																			
225	230	235																	
Glu Asp Gly Glu Leu Ser Ser Val Pro Ala Gln Leu Val Gly Gly Val																			
245	250	255																	
Gly Gln Asp Gly Val Ala Glu Leu Gly Val Arg Pro Gly Gly Gly Pro																			
260	265	270																	
Val Ser Val Glu Leu Val Gly Pro Arg Ser His Arg Leu Arg Leu His																			
275	280	285																	
Ser Leu Gly Pro Glu Asp Glu Gly Val Tyr His Cys Ala Pro Ser Ala																			
290	295	300																	
Trp Val Gln His Ala Asp Tyr Ser Trp Tyr Gln Ala Gly Ser Ala Arg																			
305	310	315																	
Ser Gly Pro Val Thr Val Tyr Pro Tyr Met His Ala Leu Asp Thr Leu																			
325	330	335																	
Phe Val Pro Leu Leu Val Gly Thr Gly Val Ala Leu Val Thr Gly Ala																			
340	345	350																	
Thr Val Leu Gly Thr Ile Thr Cys Cys Phe Met Lys Arg Leu Arg Lys																			
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Arg

&lt;210&gt; 2979

&lt;211&gt; 2191

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2979

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420

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<210> 2980  
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 <212> PRT  
 <213> Homo sapiens

<400> 2980  
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 35 40 45  
 Asn Ala Arg Arg Ala Arg Val Gly Arg Ala Glu Cys Leu Leu Ser Gly  
 50 55 60  
 Arg Pro Pro Thr Ala Val Leu Pro Arg Leu Val Glu Asn Leu Lys Ala  
 65 70 75 80  
 Arg Val Pro Val Pro Gly His Thr Glu Pro Leu Trp Ser Glu Gly Thr  
 85 90 95  
 Ala Pro Gly Gln Gly Leu Trp Ser His Ala Pro Ala Asp Gly Ser Leu  
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<210> 2981  
 <211> 617  
 <212> DNA  
 <213> Homo sapiens

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<210> 2982

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2982

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Ser	Phe	Ser	Ser	Ser	Ser	Gln	Ser	Ser	Ser	Ser	Thr	Asp	Ala	Xaa	Gln
			20					25					30		
His	Ser	Ser	Ser	Ser	Glu	Glu	Ser	Thr	Lys	Arg	Thr	Ser	His	Ser	Lys
			35				40					45			
Leu	Pro	Glu	Gln	Glu	Ala	Ala	Glu	Ala	Asp	Leu	Ser	Asn	Met	Glu	Arg
	50					55					60				
Val	Ser	Leu	Ser	Thr	Ala	Asp	Pro	Gln	Gly	Val	Thr	Tyr	Ala	Glu	Leu
65					70					75				80	
Ser	Thr	Ser	Ala	Leu	Ser	Glu	Ala	Ala	Ser	Asp	Thr	Thr	Gln	Glu	Pro
				85					90					95	
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<210> 2983

<211> 614

<212> DNA

<213> Homo sapiens

<400> 2983

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614

<210> 2984  
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<212> PRT  
<213> Homo sapiens

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Gly Ala Gly Arg Val Gly Lys Ser Ala Met Ile Val Arg Phe Leu Thr  
35 40 45  
Lys Arg Phe Ile Gly Asp Tyr Glu Pro Asn Thr Gly Lys Leu Tyr Ser  
50 55 60  
Arg Leu Val Tyr Val Glu Gly Asp Gln Leu Ser Leu Gln Ile Gln Asp  
65 70 75 80  
Thr Pro Gly Gly Val Gln Ile Gln Asp Ser Leu Pro Gln Val Val Asp  
85 90 95  
Ser Leu Gln Met Arg Ala Val Ala Glu Gly Phe Leu Leu Val Tyr Ser  
100 105 110  
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115 120 125  
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130 135 140  
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145 150 155 160  
Ile Gln Leu Ala Asn Glu Leu Gly Ser Leu Phe Leu Glu Ile Ser Thr  
165 170 175  
Ser Glu Asn Tyr Glu Asp Val Cys Asp Val Phe Gln His Leu Cys Lys  
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<210> 2985  
<211> 4547  
<212> DNA  
<213> Homo sapiens

<400> 2985  
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360



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<211> 988

<212> PRT

<213> Homo sapiens

<400> 2986

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Cys	Ala	Tyr	Arg	Thr	His	Leu	Val	Ala	Gly	Ile	Gly	Phe	Tyr	Gln	His
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Leu	Leu	Leu	Tyr	Ile	Gln	Ser	His	Tyr	Gln	Leu	Glu	Leu	Gln	Cys	Cys
		100						105					110		
Ile	Asp	Trp	Thr	His	Val	Thr	Asp	Pro	Leu	Ile	Gly	Cys	Lys	Lys	Pro

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Arg Cys Leu Val Tyr Leu Gly Asp Leu Ser Arg Tyr Gln Asn Glu Leu		
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Ala Gly Val Asp Thr Glu Leu Leu Ala Glu Arg Phe Tyr Tyr Gln Ala		
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Leu Ser Val Ala Pro Gln Ile Gly Met Pro Phe Asn Gln Leu Gly Thr		
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Arg Cys Ile Gln Ser Glu Val Ser Phe Glu Gly Ala Tyr Gly Asn Leu		
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Lys Arg Leu Tyr Asp Lys Ala Ala Lys Met Tyr His Gln Leu Lys Lys		
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Cys Glu Thr Arg Lys Leu Ser Pro Gly Lys Lys Arg Cys Lys Asp Ile		
245	250	255
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Lys Glu Glu Glu Pro Asp Pro Glu Pro Pro Pro Val Thr Pro Gln Val		
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Gly Glu Gly Arg Lys Ser Arg Lys Phe Ser Arg Leu Ser Cys Leu Arg		
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Arg Arg Arg His Pro Pro Lys Val Gly Asp Asp Ser Asp Leu Ser Glu		
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Gly Phe Glu Ser Asp Ser Ser His Asp Ser Ala Arg Ala Ser Glu Gly		
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Ser Asp Ser Gly Ser Asp Lys Ser Leu Glu Gly Gly Thr Ala Phe		
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Ile	Thr	Gly	Leu	Pro	Leu	Asp	Asn	Pro	Ser	Val	Leu	Ser	Gly	Pro
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Gln	Ala	Ala	Leu	Gln	Ala	Ala	Ala	His	Ala	Ser	Val	Asp	Ile	Lys
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985

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&lt;211&gt; 1016

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2987

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&lt;210&gt; 2988

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 2988

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 Asp Val Met Leu Glu Thr Tyr Ser Ser Leu Val Ser Leu Gly His Cys  
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<211> 64

<212> PRT

<213> Homo sapiens

<400> 2992

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<210> 2993

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<212> DNA

<213> Homo sapiens

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 360  
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687

<210> 2994  
<211> 229  
<212> PRT  
<213> Homo sapiens

<400> 2994  
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20 25 30  
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35 40 45  
Ile Gly Arg Gly Ser Phe Lys Thr Val Tyr Arg Gly Leu Asp Thr Asp  
50 55 60  
Thr Thr Val Glu Val Ala Trp Cys Glu Leu Gln Thr Arg Lys Leu Ser  
65 70 75 80  
Arg Ala Glu Arg Gln Arg Phe Ser Glu Glu Val Glu Met Leu Lys Gly  
85 90 95  
Leu Gln His Pro Asn Ile Val Arg Phe Tyr Asp Ser Trp Lys Ser Val  
100 105 110  
Leu Arg Gly Gln Val Cys Ile Val Leu Val Thr Glu Leu Met Thr Ser  
115 120 125  
Gly Thr Leu Lys Thr Tyr Leu Arg Arg Phe Arg Glu Met Lys Pro Arg  
130 135 140  
Val Leu Gln Arg Trp Ser Arg Gln Ile Leu Arg Gly Leu His Phe Leu  
145 150 155 160  
His Ser Arg Val Pro Pro Ile Leu His Arg Asp Leu Lys Cys Asp Asn  
165 170 175  
Val Phe Ile Thr Gly Pro Thr Gly Ser Val Lys Ile Gly Asp Leu Gly  
180 185 190  
Leu Ala Thr Leu Lys Arg Ala Ser Phe Ala Lys Ser Val Ile Gly Thr  
195 200 205  
Pro Glu Phe Met Ala Pro Glu Met Tyr Glu Glu Lys Tyr Asp Glu Ala  
210 215 220  
Val Asp Val Tyr Ala  
225

<210> 2995  
<211> 1879  
<212> DNA  
<213> Homo sapiens

<400> 2995  
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240

atgtgtcaag aagaccacag ttagcaccag gaaaggaact ttacttttagc ttctgattac  
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480  
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540  
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1080  
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1140  
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1260  
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1320  
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1380  
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1620  
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1680  
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1740  
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1860

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1879

<210> 2996  
<211> 101  
<212> PRT  
<213> Homo sapiens

<400> 2996  
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Ile Phe Thr Leu Leu Leu Leu Leu Phe Leu Arg Trp Ser Leu Thr  
20 25 30  
Leu Xaa Thr Gln Ala Gly Ile Gln Trp Cys Asp Leu Ser Ser Leu Gln  
35 40 45  
Pro Pro Pro Pro Arg Phe Lys Arg Phe Ser Cys Leu Ser Leu Leu Ser  
50 55 60  
Ser Trp Asp Ser Asp Arg Cys Leu Pro Pro His Pro Gly Asp Phe Cys  
65 70 75 80  
Ile Phe Ser Arg Asp Gly Val Ser Pro Cys Cys Ser Gly Trp Ser Arg  
85 90 95  
Thr Pro Asp Leu Lys  
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<210> 2997  
<211> 800  
<212> DNA  
<213> Homo sapiens

<400> 2997  
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120  
acaaccatac ctgcttcctc tgagataaca agaattgaga tggagtcaac atccaccctg  
180  
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240  
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300  
tcctctagca gaggacctag ccctgatcag tccacaatgt cacaagacat atccactgaa  
360  
gtgatcacca ggctctctac ctccccatc aagacagaat ctacagaaat gaccattacc  
420  
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480  
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660  
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720

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<210> 2998  
 <211> 266  
 <212> PRT  
 <213> Homo sapiens

<400> 2998  
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 20 25 30  
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 35 40 45  
 Ile Thr Arg Ile Glu Met Glu Ser Thr Ser Thr Leu Thr Pro Thr Pro  
 50 55 60  
 Arg Glu Thr Ser Thr Ser Gln Glu Ile His Ser Ala Thr Lys Pro Ser  
 65 70 75 80  
 Thr Val Pro Tyr Lys Ala Leu Thr Ser Ala Thr Ile Glu Asp Ser Met  
 85 90 95  
 Thr Gln Val Met Ser Ser Ser Arg Gly Pro Ser Pro Asp Gln Ser Thr  
 100 105 110  
 Met Ser Gln Asp Ile Ser Thr Glu Val Ile Thr Arg Leu Ser Thr Ser  
 115 120 125  
 Pro Ile Lys Thr Glu Ser Thr Glu Met Thr Ile Thr Thr Gln Thr Gly  
 130 135 140  
 Ser Pro Gly Ala Thr Ser Arg Gly Thr Leu Thr Leu Asp Thr Ser Thr  
 145 150 155 160  
 Thr Phe Met Ser Gly Thr His Ser Thr Ala Ser Gln Arg Phe Ser His  
 165 170 175  
 Ser Gln Met Thr Ala Leu Met Ser Arg Thr Pro Gly Asp Val Pro Trp  
 180 185 190  
 Leu Thr His Pro Ser Gly Glu Glu Pro Ala Ser Ala Ser Phe Ser Leu  
 195 200 205  
 Ala Ser Pro Val Leu Thr Ser Phe Phe Ser Phe Phe Ala His Ser Gln  
 210 215 220  
 Lys Pro Pro Pro Phe Leu Val Pro Gly Gln Thr Phe Ser Leu Gly Leu  
 225 230 235 240  
 Gly Lys Pro Lys Met Trp Gly Gln Pro Arg Thr Glu Thr Phe Pro Pro  
 245 250 255  
 Met Asp Asn Leu Phe Glu Lys Gly Pro Phe  
 260 265

<210> 2999  
 <211> 550  
 <212> DNA  
 <213> Homo sapiens

<400> 2999  
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 120  
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 180  
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 acagtgaaga cccacctcca agccagggaag agcctgaagc ctgggggatg ggctgccagt  
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 420  
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 550

<210> 3000

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3000

Met	Cys	Ser	Ser	Gln	Gln	Arg	Gly	Gly	Leu	Gly	Met	Gly	Ser	Thr	Ser
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Val	Gln	Leu	Val	Val	Leu	Ile	Ser	Ala	Gln	Leu	Trp	Leu	Ser	Pro	Gly
			20					25					30		
Ala	Phe	Met	Gly	Leu	Arg	Gly	Glu	Lys	Val	His	Ala	Asn	Ser	Ser	Met
		35					40					45			
Gly	Gly	His	Gly	Trp	Ala	Gln	Gly	Lys	Ala	Pro	Gln	Val	Ala	Leu	Ala
	50					55				60					
Val	Ser	Gly	Thr	Gly	Asp	Pro	Ser	Pro	Arg	Leu	Gln	Ala	Phe	Pro	Gly
65					70					75				80	
Leu	Glu	Val	Gly	Leu	His	Cys	Gly	Pro	Ala	Ser	Phe	His	Pro	Gly	Ala
				85					90					95	
Cys	Leu	Pro	Pro	Ala	Ala	Val	His	Gly	Asp	Gln	Ala	Val	His	Val	Lys
			100					105					110		
Gly	Cys	Leu	Gln	Ala	Ser	Thr	Gly	Leu	Ser	Ser	Val	His	Pro	Ser	Ala
		115					120					125			
Ser	Phe	Pro	Cys	Leu	Ser	Val	Pro	Lys	Ala	Trp	Arg	Gly	Pro	Lys	Trp
	130					135				140					
Gln	Gly	Gly	Trp	His	Val	Ser	Thr	Thr	Pro	Ser	Met	Cys	Thr	Leu	Ser
145					150					155				160	
Trp	Ala	Val	Thr	Ala	Pro	Gly									
				165											

<210> 3001

<211> 1092

<212> DNA

<213> Homo sapiens

<400> 3001

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 180  
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 240  
 actgaggcat ccagcccagc tcaggccctg ccaccnca gtaccaaage atcattgtca  
 300  
 ggcaaggat acagaacaca gtgctctcac cagactgcag cttgggggac acccagcacg  
 360  
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 420  
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 480  
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 660  
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 720  
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 780  
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 1080  
 aaaatcaaaa aa  
 1092

&lt;210&gt; 3002

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3002

Met	Ala	Pro	Phe	Arg	Ile	Pro	Gln	Asp	Val	Ile	His	Asn	Ser	Ser	Ala
1				5					10					15	
Trp	Leu	Ser	Leu	Lys	Gly	His	Cys	Ser	Val	Ser	Ala	Leu	Arg	Cys	Leu
			20					25					30		
Glu	Val	Gln	Arg	Leu	Ser	Pro	Tyr	Val	Cys	Leu	Gly	Glu	Ser	Gln	Lys
		35					40					45			
Val	Glu	Ser	Gln	Pro	Cys	Ser	Ala	His	Gln	Cys	Phe	Phe	Tyr	Asn	Pro
	50					55					60				
Asp	Ile	Ala	Lys	Thr	Ala	Val	Pro	Thr	Glu	Ala	Ser	Ser	Pro	Ala	Gln

65		70		75		80									
Ala	Leu	Pro	Pro	Xaa	Ser	Thr	Lys	Ala	Ser	Leu	Ser	Gly	Lys	Gly	Tyr
			85						90					95	
Arg	Thr	Gln	Cys	Ser	His	Gln	Thr	Ala	Ala	Trp	Gly	Thr	Pro	Ser	Thr
			100					105					110		
Glu	Arg	Ser													
		115													

<210> 3003  
 <211> 474  
 <212> DNA  
 <213> Homo sapiens

<400> 3003  
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 120  
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 240  
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 360  
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 474

<210> 3004  
 <211> 155  
 <212> PRT  
 <213> Homo sapiens

<400> 3004  
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 Val Ile Met Glu Ala Leu Arg Ser Tyr Asn Gln Glu His Ser Gln Ser  
 20 25 30  
 Phe Thr Phe Asp Asp Ala Gln Gln Glu Asp Arg Lys Arg Leu Ala Glu  
 35 40 45  
 Leu Leu Val Ser Val Leu Glu Gln Gly Leu Pro Pro Ser His Arg Val  
 50 55 60  
 Ile Trp Leu Gln Ser Val Arg Ile Leu Ser Arg Asp Arg Asn Cys Leu  
 65 70 75 80  
 Asp Pro Phe Thr Ser Arg Gln Ser Leu Gln Ala Leu Ala Cys Tyr Ala  
 85 90 95  
 Asp Ile Ser Val Ser Glu Gly Ser Val Pro Glu Ser Ala Asp Met Asp  
 100 105 110  
 Val Val Leu Glu Ser Leu Lys Cys Leu Cys Asn Leu Val Leu Ser Ser  
 115 120 125  
 Pro Val Ala Gln Met Leu Ala Ala Glu Ala Arg Leu Val Val Lys Leu



130	135	140
Thr Glu Arg Val Gly Leu Tyr Arg Glu Arg Ser		
145	150	155

<210> 3005  
 <211> 799  
 <212> DNA  
 <213> Homo sapiens

<400> 3005  
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 ccaggcctcg tgaagattgt ccgcaacagc cggcggaag gactgatccg cgcgcggctg  
 180  
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 240  
 aacacgggct gggccgagcc cgcactgtcg cggatccgag aggaccggcg tcgcatcgtg  
 300  
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 660  
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 720  
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 799

<210> 3006  
 <211> 266  
 <212> PRT  
 <213> Homo sapiens

<400> 3006  
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 Ile Leu Val Asp Asp Asn Ser Asp Asn Val Glu Leu Lys Phe Asn Leu  
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 Asp Gln Tyr Val Asn Lys Arg Tyr Pro Gly Leu Val Lys Ile Val Arg  
 35 40 45  
 Asn Ser Arg Arg Glu Gly Leu Ile Arg Ala Arg Leu Gln Gly Trp Lys  
 50 55 60  
 Ala Ala Thr Ala Pro Val Val Gly Phe Phe Asp Ala His Val Glu Phe

65					70					75					80
Asn	Thr	Gly	Trp	Ala	Glu	Pro	Ala	Leu	Ser	Arg	Ile	Arg	Glu	Asp	Arg
				85					90					95	
Arg	Arg	Ile	Val	Leu	Pro	Ala	Ile	Asp	Asn	Ile	Lys	Tyr	Ser	Thr	Phe
			100					105					110		
Glu	Val	Gln	Gln	Tyr	Ala	Asn	Ala	Ala	His	Gly	Tyr	Asn	Trp	Gly	Leu
		115					120					125			
Trp	Cys	Met	Tyr	Ile	Ile	Pro	Pro	Gln	Asp	Trp	Leu	Asp	Arg	Gly	Asp
	130					135					140				
Glu	Ser	Ala	Pro	Ile	Arg	Thr	Pro	Ala	Met	Ile	Gly	Cys	Ser	Phe	Val
145					150					155					160
Val	Asp	Arg	Glu	Tyr	Phe	Gly	Asp	Ile	Gly	Leu	Leu	Asp	Pro	Gly	Met
			165					170						175	
Glu	Val	Tyr	Gly	Gly	Glu	Asn	Val	Glu	Leu	Gly	Met	Arg	Val	Trp	Gln
			180					185					190		
Cys	Gly	Gly	Ser	Met	Glu	Val	Leu	Pro	Cys	Ser	Arg	Val	Ala	His	Ile
	195						200					205			
Glu	Arg	Thr	Arg	Lys	Pro	Tyr	Asn	Asn	Asp	Ile	Asp	Tyr	Tyr	Ala	Lys
	210					215					220				
Arg	Asn	Ala	Leu	Arg	Thr	Ala	Glu	Val	Trp	Met	Asp	Asp	Phe	Lys	Ser
225					230					235					240
His	Val	Tyr	Met	Ala	Trp	Asn	Ile	Pro	Met	Ser	Asn	Pro	Gly	Val	Asp
			245						250					255	
Phe	Gly	Asp	Val	Ser	Glu	Arg	Leu	Ala	Leu						
		260					265								

&lt;210&gt; 3007

&lt;211&gt; 536

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3007

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 180  
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 240  
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 300  
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 360  
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 420  
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 536

&lt;210&gt; 3008

&lt;211&gt; 163

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3008

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Met Thr Leu Leu His Tyr Thr Cys Lys Ser Gly Ala His Gly Ile Gly
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Asp Val Glu Thr Ala Val Lys Phe Ala Thr Gln Leu Ile Asp Leu Gly
          20           25           30
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Thr Ser Lys Pro Lys Asp Val Asp Ala Pro Cys Ser Asp Phe Asn Phe
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Gly Thr Ala Leu His Ile Ala Ala Tyr Asn Leu Cys Ala Gly Ala Val
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Gly Gln Ile Pro Ala Asp Val Val Pro Asp Pro Val Asp Met Pro Leu
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Glu Met Ala Asp Ala Ala Ala Thr Ala Lys Glu Ile Lys Gln Met Leu
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&lt;210&gt; 3009

&lt;211&gt; 1335

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3009

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<211> 310

<212> PRT

<213> Homo sapiens

<400> 3010

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Ser	Gln	Val	Gly	Arg	Val	Trp	Pro	Ser	Ser	Tyr	Arg	Ala	Leu	Ile	Ser
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<211> 3253

<212> DNA

<213> Homo sapiens

<400> 3011

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<211> 870

<212> PRT

<213> Homo sapiens

<400> 3012

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Leu	Glu	Gln	Asp	Thr	Gln	Gly	Leu	Asp	Gly	Trp	Trp	Leu	Cys	Ser	Leu
			35				40					45			
His	Gly	Arg	Gln	Gly	Ile	Val	Pro	Gly	Asn	Arg	Leu	Lys	Ile	Leu	Val
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Gly	Met	Tyr	Asp	Lys	Lys	Pro	Ala	Gly	Pro	Gly	Ser	Gly	Pro	Pro	Ala
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Thr	Pro	Ala	Gln	Pro	Gln	Pro	Gly	Leu	His	Ala	Pro	Ala	Pro	Pro	Ala
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Ser	Gln	Tyr	Thr	Pro	Met	Leu	Pro	Asn	Thr	Tyr	Gln	Pro	Gln	Pro	Asp
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Thr	Arg	Gln	Gly	Lys	Ser	Gln	Leu	Glu	Leu	Gln	Gln	Leu	Lys	Gln	Phe
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&lt;210&gt; 3013

&lt;211&gt; 248

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3013

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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3017

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<211> 104

<212> PRT

<213> Homo sapiens

<400> 3018

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			20					25					30		
Gln	Arg	Trp	Ile	Thr	Ile	Gln	His	Arg	Trp	Ser	Ser	Ala	Leu	His	Cys
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Lys	Ala	Asn	Arg	Ala	Ile	Pro	Gln	Ala	Val	Thr	Ser	Thr	Arg	Leu	Gly
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<210> 3019

<211> 882

<212> DNA

<213> Homo sapiens

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<210> 3020

<211> 58

<212> PRT

<213> Homo sapiens

<400> 3020

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			20					25					30		
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<210> 3021

<211> 1008

<212> DNA

<213> Homo sapiens

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<210> 3022

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3022

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			20					25					30		
His	Cys	Ser	Leu	Asp	Leu	Pro	Gly	Ser	Ser	Asp	Pro	Pro	Gly	Ser	Pro
		35					40					45			
Pro	Val	Ala	Gly	Thr	Thr	Gly	Ala	Leu	Pro	His	Arg	Lys	Ala	His	Phe
	50					55					60				
Leu	Glu	Ala	Glu	Thr	Glu	Ala	Pro	Ser	Gly	Lys	Gly	Asp	Pro	Pro	Gly
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Met	Arg	Gly	Ala	Gln	Arg	Ala	Ala	Thr	Trp	Gly	Pro	Thr	Arg		
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<210> 3023

<211> 1834

<212> DNA

<213> Homo sapiens

<400> 3023

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1834

&lt;210&gt; 3024

&lt;211&gt; 347

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3024

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      35          40          45
Met Leu Arg Ser His Val Leu Val Met Ser Phe Ile Gly Lys Asp Asp
      50          55          60
Met Pro Ala Pro Leu Leu Lys Asn Val Gln Leu Ser Glu Ser Lys Ala
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Arg Glu Leu Tyr Leu Gln Val Ile Gln Tyr Met Arg Arg Met Tyr Gln
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Asp Ala Arg Leu Val His Ala Asp Leu Ser Glu Phe Asn Met Leu Tyr
      100          105          110
His Gly Gly Gly Val Tyr Ile Ile Asp Val Ser Gln Ser Val Glu His
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Asp His Pro His Ala Leu Glu Phe Leu Arg Lys Asp Cys Ala Asn Val
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Leu Phe Glu Phe Val Thr Asp Pro Ser Ile Thr His Glu Asn Met Asp
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Glu Arg Ser Ser Gln Asp His Val Asp Glu Glu Val Phe Lys Arg Ala
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Arg Ser Ser Glu Gly Pro Cys Thr Leu Glu Asn Gln Val Glu Glu Arg
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Asp Ser Glu Glu Gln Gly Asp His Ala Arg Pro Lys Lys His Thr Thr
      290          295          300
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&lt;210&gt; 3025

&lt;211&gt; 1370

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3025

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1370

&lt;210&gt; 3026

&lt;211&gt; 152

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3026

Met Glu Ser Leu Ser Lys Gly Gly Asn Ile Met Glu Gln Asn Phe Glu  
 1 5 10 15  
 Pro Ile Arg Arg Gln Ser Leu Thr Pro Pro Pro Gln Asn Thr Ile Thr  
 20 25 30  
 Trp Glu Glu Tyr Ile Ser Ala Glu Asn Gly Lys Ala Pro His Leu Gly  
 35 40 45  
 Arg Glu Leu Val Cys Lys Glu Ser Lys Lys Thr Phe Lys Ala Thr Ile  
 50 55 60  
 Ala Met Ser Gln Glu Phe Pro Leu Gly Ile Glu Leu Leu Leu Asn Val  
 65 70 75 80  
 Leu Glu Val Val Ala Pro Phe Lys His Phe Asn Lys Leu Arg Glu Phe  
 85 90 95  
 Val Gln Met Lys Leu Pro Pro Gly Phe Pro Val Lys Leu Asp Ile Pro  
 100 105 110  
 Val Phe Pro Thr Ile Thr Ala Thr Val Thr Phe Gln Glu Phe Arg Tyr  
 115 120 125  
 Asp Glu Phe Asp Gly Ser Ile Phe Thr Ile Pro Asp Asp Tyr Lys Glu  
 130 135 140  
 Asp Pro Ser Arg Phe Pro Asp Leu  
 145 150

&lt;210&gt; 3027

&lt;211&gt; 1154

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3027

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 60  
 atccacgcca aggccttttg atcggccgtg ggtacatccg tctgagccgt tcctttccat  
 120  
 cgcagacggc ggccctccgcg gcgctctcca gtcattggact accggcggct tctcatgagc  
 180  
 cgggtggtcc cggggcaatt cgacgacgcg gactcctctg acagtgaaaa cagagacttg  
 240  
 aagacagtca aagagaagga tgacattctg tttgaagacc ttcaagacaa tgtgaatgag  
 300  
 aatggtgaag gtgaaataga agatgaggag gaggagggtt atgatgatga tgatgatgac  
 360  
 tgggactggg atgaaggagt tggaaaactc gccaaagggtt atgtctggaa tggaggaagc  
 420  
 aacccacagg caaatcgaca gacctccgac agcagttcag ccaaaatgtc tactccagca  
 480  
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 540  
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 600  
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 660  
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<210> 3028

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3028

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Asp	Asp	Ala	Asp	Ser	Ser	Asp	Ser	Glu	Asn	Arg	Asp	Leu	Lys	Thr	Val
			20					25					30		
Lys	Glu	Lys	Asp	Asp	Ile	Leu	Phe	Glu	Asp	Leu	Gln	Asp	Asn	Val	Asn
		35					40					45			
Glu	Asn	Gly	Glu	Gly	Glu	Ile	Glu	Asp	Glu	Glu	Glu	Glu	Gly	Tyr	Asp
	50					55				60					
Asp	Asp	Asp	Asp	Asp	Trp	Asp	Trp	Asp	Glu	Gly	Val	Gly	Lys	Leu	Ala
65					70				75					80	
Lys	Gly	Tyr	Val	Trp	Asn	Gly	Gly	Ser	Asn	Pro	Gln	Ala	Asn	Arg	Gln
			85					90					95		
Thr	Ser	Asp	Ser	Ser	Ser	Ala	Lys	Met	Ser	Thr	Pro	Ala	Asp	Lys	Val
			100					105					110		
Leu	Arg	Lys	Phe	Glu	Asn	Lys	Ile	Asn	Leu	Asp	Lys	Leu	Asn	Val	Thr
		115					120					125			
Asp	Ser	Val	Ile	Asn	Lys	Val	Thr	Glu	Lys	Ser	Arg	Gln	Lys	Glu	Ala
		130				135					140				
Asp	Met	Tyr	Arg	Ile	Lys	Asp	Lys	Ala	Asp	Arg	Ala	Thr	Val	Glu	Gln
145					150					155				160	
Val	Leu	Asp	Pro	Arg	Thr	Arg	Met	Ile	Leu	Phe	Lys	Met	Leu	Thr	Arg
			165					170					175		
Gly	Ile	Ile	Thr	Glu	Ile	Asn	Gly	Cys	Ile	Ser	Thr	Gly	Lys	Glu	Ala
			180				185					190			
Asn	Val	Tyr	His	Ala	Ser	Thr	Ala	Asn	Gly	Glu	Ser	Arg	Ala	Ile	Lys
		195					200					205			
Ile	Tyr	Lys	Thr	Ser	Ile	Leu	Val	Phe	Lys	Asp	Arg	Asp	Lys	Tyr	Val
	210					215					220				
Ser	Gly	Glu	Phe	Arg	Phe	Arg	His	Gly	Tyr	Cys	Lys	Gly	Asn	Pro	Arg
225					230					235				240	
Lys	Met	Val	Lys	Thr	Trp	Ala	Glu	Lys	Glu	Met	Arg	Asn	Leu	Ile	Arg
			245					250					255		
Leu	Asn	Thr	Ala	Glu	Ile	Pro	Cys	Pro	Glu	Pro	Ile	Met	Leu	Arg	Ser

		260						265						270														
His	Val	Leu	Val	Met	Ser	Phe	Ile	Gly	Lys	Asp	Asp	Ile	Ser	Phe	His													
		275						280						285														
Ser	Arg	Pro	Ala	Pro	Leu	Leu	Lys	Asn	Val	Gln	Leu	Ser	Glu	Ser	Lys													
		290						295						300														
Ala	Arg	Glu	Leu	Tyr	Leu	Gln	Val	Ile	Gln	Tyr	Met	Arg	Arg	Met	Tyr													
305						310					315				320													
Gln	Asp	Ala	Arg	Leu	Val	His	Ala	Asp	Arg	Arg																		
		325						330																				

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<210> 3029
<211> 344
<212> DNA
<213> Homo sapiens
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120
acatttcccg aggaactaga tatgagtact tttattgatg ttgaagatga aaaatctcct
180
cagactgaaa gttgcactga caggggagca gaaaatgaag gtagttgtca cagtgatcag
240
atgagcaacg atttctccaa tgatgatggt gttgatgaag gaatctgttt tgaaaccaat
300
agtggaactg aaaagatctc aaaatctgga cctgaaaaga attc
344
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<210> 3030
<211> 114
<212> PRT
<213> Homo sapiens
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<400> 3030
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Leu Thr Leu Gln Leu Lys Arg Phe Asp Phe Asp Tyr Thr Thr Met His
          20          25          30
Arg Ile Lys Leu Asn Asp Arg Met Thr Phe Pro Glu Glu Leu Asp Met
          35          40          45
Ser Thr Phe Ile Asp Val Glu Asp Glu Lys Ser Pro Gln Thr Glu Ser
          50          55          60
Cys Thr Asp Arg Gly Ala Glu Asn Glu Gly Ser Cys His Ser Asp Gln
65          70          75          80
Met Ser Asn Asp Phe Ser Asn Asp Asp Gly Val Asp Glu Gly Ile Cys
          85          90          95
Phe Glu Thr Asn Ser Gly Thr Glu Lys Ile Ser Lys Ser Gly Pro Glu
          100          105          110
Lys Asn

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<210> 3031
<211> 567
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&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3031

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 120  
 gttggtcctg atgttattcc cctgccacac atctacggag ctccaatcaa aggtgtggaa  
 180  
 gtgttctgtc ctctggatcc cccgccgcca tatgaagctg tggtagacca gatggaccag  
 240  
 gagcagggat cttcattcca aatgtcagaa ggatcagaag ctgctgtgat cccattggat  
 300  
 ctgggctgca cacaagtgc tcaagatggg gacattccta acatacctgc cgaagaaaat  
 360  
 gcatccacct caactcccag ttcaaccctg gtgcgtccta tcagaagccg gagagccctc  
 420  
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 480  
 gccccagtgc tcagctgtga agctgcaaca cagactgaaa ggagactgga tctggctgca  
 540  
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 567

&lt;210&gt; 3032

&lt;211&gt; 189

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3032

Ala	Glu	Glu	Ala	Glu	Asp	His	Gly	Arg	Ile	Pro	Asp	Pro	Asp	Asp	Phe	1	5	10	15
Val	Pro	Pro	Val	Pro	Pro	Pro	Ser	Tyr	Phe	Ala	Thr	Phe	Tyr	Ser	Cys	20	25	30	
Thr	Pro	Arg	Met	Asn	Arg	Arg	Leu	Val	Gly	Pro	Asp	Val	Ile	Pro	Leu	35	40	45	
Pro	His	Ile	Tyr	Gly	Ala	Arg	Ile	Lys	Gly	Val	Glu	Val	Phe	Cys	Pro	50	55	60	
Leu	Asp	Pro	Pro	Pro	Pro	Tyr	Glu	Ala	Val	Val	Ser	Gln	Met	Asp	Gln	65	70	75	80
Glu	Gln	Gly	Ser	Ser	Phe	Gln	Met	Ser	Glu	Gly	Ser	Glu	Ala	Ala	Val	85	90	95	
Ile	Pro	Leu	Asp	Leu	Gly	Cys	Thr	Gln	Val	Thr	Gln	Asp	Gly	Asp	Ile	100	105	110	
Pro	Asn	Ile	Pro	Ala	Glu	Glu	Asn	Ala	Ser	Thr	Ser	Thr	Pro	Ser	Ser	115	120	125	
Thr	Leu	Val	Arg	Pro	Ile	Arg	Ser	Arg	Arg	Ala	Leu	Pro	Pro	Leu	Arg	130	135	140	
Thr	Arg	Ser	Lys	Ser	Asp	Pro	Val	Leu	His	Pro	Ser	Glu	Glu	Arg	Ala	145	150	155	160
Ala	Pro	Val	Leu	Ser	Cys	Glu	Ala	Ala	Thr	Gln	Thr	Glu	Arg	Arg	Leu	165	170	175	
Asp	Leu	Ala	Ala	Val	Thr	Leu	Arg	Arg	Gly	Leu	Arg	Ser							

180

185

&lt;210&gt; 3033

&lt;211&gt; 821

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3033

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 ttccatgga atgaggagga cgaaatggac atgacttggg agaagagact tgctaagaaa  
 120  
 tactatgata aattatttaa ggaatactgc atagcagatc tcagtaaata taaagaaaat  
 180  
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 240  
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 300  
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 360  
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 420  
 aaaacccaaa aagactgtga agagtcacat cataaaaaat ccagattatc ttctgcagaa  
 480  
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 540  
 cttagaaact ctgatgagga agaaagtgtc tcagaatctg aactttggaa ggggccacta  
 600  
 ccagagacag atgaaaaatc acaggaagaa gaatttgatg agtattttca ggatttggtt  
 660  
 ctatgagacg agagagagaa gcctccgctc cttaatgtga aacttcatga agttttaaac  
 720  
 ctcatgcaat ttgaaattcc atctacgtct ttatctgcaa gttacagctt ctgtgctttg  
 780  
 tcttcgcaac tacaaatcca ggttctctca gcaacaacac a  
 821

&lt;210&gt; 3034

&lt;211&gt; 221

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3034

Xaa	Arg	Val	Lys	Gly	Glu	Asn	Asp	Lys	Thr	Asp	Leu	Asp	Val	Ile	Arg
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Glu	Asn	His	Arg	Phe	Leu	Trp	Asn	Glu	Asp	Glu	Met	Asp	Met	Thr	
		20					25				30				
Trp	Glu	Lys	Arg	Leu	Ala	Lys	Lys	Tyr	Tyr	Asp	Lys	Leu	Phe	Lys	Glu
		35				40					45				
Tyr	Cys	Ile	Ala	Asp	Leu	Ser	Lys	Tyr	Lys	Glu	Asn	Lys	Phe	Gly	Phe
	50					55				60					
Arg	Trp	Arg	Val	Glu	Lys	Glu	Val	Ile	Ser	Gly	Lys	Gly	Gln	Phe	Phe
65				70				75					80		
Cys	Gly	Asn	Lys	Tyr	Cys	Asp	Lys	Lys	Glu	Gly	Leu	Lys	Ser	Trp	Glu



				85					90					95					
Val	Asn	Phe	Gly	Tyr	Ile	Glu	His	Gly	Glu	Lys	Arg	Asn	Ala	Leu	Val				
			100					105					110						
Lys	Leu	Arg	Leu	Cys	Gln	Glu	Cys	Ser	Ile	Lys	Leu	Asn	Phe	His	His				
		115					120					125							
Arg	Arg	Lys	Glu	Ile	Lys	Ser	Lys	Lys	Arg	Lys	Asp	Lys	Thr	Lys	Lys				
		130				135					140								
Asp	Cys	Glu	Glu	Ser	Ser	His	Lys	Lys	Ser	Arg	Leu	Ser	Ser	Ala	Glu				
145					150				155					160					
Glu	Ala	Ser	Lys	Lys	Lys	Asp	Lys	Gly	His	Ser	Ser	Ser	Lys	Lys	Ser				
			165					170					175						
Glu	Asp	Ser	Leu	Leu	Arg	Asn	Ser	Asp	Glu	Glu	Glu	Ser	Ala	Ser	Glu				
		180					185					190							
Ser	Glu	Leu	Trp	Lys	Gly	Pro	Leu	Pro	Glu	Thr	Asp	Glu	Lys	Ser	Gln				
	195					200					205								
Glu	Glu	Glu	Phe	Asp	Glu	Tyr	Phe	Gln	Asp	Leu	Phe	Leu							
	210					215					220								

&lt;210&gt; 3035

&lt;211&gt; 878

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3035

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840
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878

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<210> 3036  
 <211> 65  
 <212> PRT  
 <213> Homo sapiens

<400> 3036  
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 Glu Cys Asn Gly Ala Ile Ser Ala His Cys Asn Leu Pro Leu Pro Gly  
 20 25 30  
 Ser Ser Asn Ser Pro Asp Pro His Ser Gly Pro Ala Pro Ser Gln Thr  
 35 40 45  
 Val Ile Leu Phe Leu Glu Gly Asn Arg Asp Pro Gly Gly Arg Gly Trp  
 50 55 60  
 Pro  
 65

<210> 3037  
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 <212> DNA  
 <213> Homo sapiens

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 180  
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2520

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 3240  
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 3300  
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 ctattttgca ttttttcttt taccatgttt cagtttctgc atgtagattt aaataaaaaa  
 3420  
 caaaacttgt aaagttgtaa catttcacat ggaaatgctg cccaatcttc accagcttca  
 3480  
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 3538

&lt;210&gt; 3038

&lt;211&gt; 697

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3038

Pro	Asn	Cys	Val	Asn	Arg	Asp	Leu	Ile	Asp	Lys	Ala	Ala	Met	Asp	Phe
1				5				10					15		
Cys	Met	Asn	Met	Asn	Thr	Lys	Ala	Asn	Arg	Lys	Lys	Leu	Val	Arg	Ala
		20						25				30			
Leu	Phe	Ile	Val	Pro	Arg	Gln	Arg	Leu	Asp	Leu	Leu	Pro	Phe	Tyr	Ala
	35					40					45				
Arg	Leu	Val	Ala	Thr	Leu	His	Pro	Cys	Met	Ser	Asp	Val	Ala	Glu	Asp
	50				55					60					
Leu	Cys	Ser	Met	Leu	Arg	Gly	Asp	Phe	Arg	Phe	His	Val	Arg	Lys	Lys
65				70				75					80		
Asp	Gln	Ile	Asn	Ile	Glu	Thr	Lys	Asn	Lys	Thr	Val	Arg	Phe	Ile	Gly
			85					90					95		
Glu	Leu	Thr	Lys	Phe	Lys	Met	Phe	Thr	Lys	Asn	Asp	Thr	Leu	His	Cys

			100					105					110				
Leu	Lys	Met	Leu	Leu	Ser	Asp	Phe	Ser	His	His	His	Ile	Glu	Met	Ala		
		115						120					125				
Cys	Thr	Leu	Leu	Glu	Thr	Cys	Gly	Arg	Phe	Leu	Phe	Arg	Ser	Pro	Glu		
		130					135					140					
Ser	His	Leu	Arg	Thr	Ser	Val	Leu	Leu	Glu	Gln	Met	Met	Arg	Lys	Lys		
145					150					155				160			
Gln	Ala	Met	His	Leu	Asp	Ala	Arg	Tyr	Val	Thr	Met	Val	Glu	Asn	Ala		
			165						170					175			
Tyr	Tyr	Tyr	Cys	Asn	Pro	Pro	Pro	Ala	Glu	Lys	Thr	Val	Lys	Lys	Lys		
			180					185					190				
Arg	Pro	Pro	Leu	Gln	Glu	Tyr	Val	Arg	Lys	Leu	Leu	Tyr	Lys	Asp	Leu		
		195					200					205					
Ser	Lys	Val	Thr	Thr	Glu	Lys	Val	Leu	Arg	Gln	Met	Arg	Lys	Leu	Pro		
	210					215					220						
Trp	Gln	Asp	Gln	Glu	Val	Lys	Asp	Tyr	Val	Ile	Cys	Cys	Met	Ile	Asn		
225			230						235					240			
Ile	Trp	Asn	Val	Lys	Tyr	Asn	Ser	Ile	His	Cys	Val	Ala	Asn	Leu	Leu		
			245						250					255			
Ala	Gly	Leu	Val	Leu	Tyr	Gln	Glu	Asp	Val	Gly	Ile	His	Val	Val	Asp		
		260					265						270				
Gly	Val	Leu	Glu	Asp	Ile	Arg	Leu	Gly	Met	Glu	Val	Asn	Gln	Pro	Lys		
		275					280					285					
Phe	Asn	Gln	Arg	Arg	Ile	Ser	Ser	Ala	Lys	Phe	Leu	Gly	Glu	Leu	Tyr		
	290					295				300							
Asn	Tyr	Arg	Met	Val	Glu	Ser	Ala	Val	Ile	Phe	Arg	Thr	Leu	Tyr	Ser		
305				310					315					320			
Phe	Thr	Ser	Phe	Gly	Val	Asn	Pro	Asp	Gly	Ser	Pro	Ser	Ser	Leu	Asp		
			325					330						335			
Pro	Pro	Glu	His	Leu	Phe	Arg	Ile	Arg	Leu	Val	Cys	Thr	Ile	Leu	Asp		
		340					345						350				
Thr	Cys	Gly	Gln	Tyr	Phe	Asp	Arg	Gly	Ser	Ser	Lys	Arg	Lys	Leu	Asp		
	355					360						365					
Cys	Phe	Leu	Val	Tyr	Phe	Gln	Arg	Tyr	Val	Trp	Trp	Lys	Lys	Ser	Leu		
	370					375				380							
Glu	Val	Trp	Thr	Lys	Asp	His	Pro	Phe	Pro	Ile	Asp	Ile	Asp	Tyr	Met		
385				390					395					400			
Ile	Ser	Asp	Thr	Leu	Glu	Leu	Leu	Arg	Pro	Lys	Ile	Lys	Leu	Cys	Asn		
			405				410						415				
Ser	Leu	Glu	Glu	Ser	Ile	Arg	Gln	Val	Gln	Asp	Leu	Glu	Arg	Glu	Phe		
		420					425					430					
Leu	Ile	Lys	Leu	Gly	Leu	Val	Asn	Asp	Lys	Asp	Ser	Lys	Asp	Phe	Met		
	435					440						445					
Thr	Glu	Gly	Glu	Asn	Leu	Glu	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Gly	Gly		
	450					455					460						
Ala	Glu	Thr	Glu	Glu	Gln	Ser	Gly	Asn	Glu	Ser	Glu	Val	Asn	Glu	Pro		
465					470					475				480			
Glu	Glu	Glu	Glu	Gly	Ser	Asp	Asn	Asp	Asp	Glu	Gly	Glu	Glu	Glu			
			485					490					495				
Glu	Glu	Glu	Asn	Thr	Asp	Tyr	Leu	Thr	Asp	Ser	Asn	Lys	Glu	Asn	Glu		
		500					505					510					
Thr	Asp	Glu	Asn	Thr	Glu	Val	Met	Ile	Lys	Gly	Gly	Gly	Gly	Leu	Lys		
	515					520					525						
His	Val	Pro	Cys	Val	Glu	Asp	Glu	Asp	Phe	Ile	Gln	Ala	Leu	Asp	Lys		

530                      535                      540  
 Met Met Leu Glu Asn Leu Gln Gln Arg Ser Gly Glu Ser Val Lys Val  
 545                      550                      555                      560  
 His Gln Leu Asp Val Ala Ile Pro Leu His Leu Lys Ser Gln Leu Arg  
                     565                      570                      575  
 Lys Gly Pro Pro Leu Gly Gly Gly Glu Gly Glu Ala Glu Ser Ala Asp  
                     580                      585                      590  
 Thr Met Pro Phe Val Met Leu Thr Arg Lys Gly Asn Lys Gln Gln Phe  
                     595                      600                      605  
 Lys Ile Leu Asn Val Pro Met Ser Ser Gln Leu Ala Ala Asn His Trp  
                     610                      615                      620  
 Asn Gln Gln Gln Ala Glu Gln Glu Glu Arg Met Arg Met Lys Lys Leu  
 625                      630                      635                      640  
 Thr Leu Asp Ile Asn Glu Arg Gln Glu Gln Glu Asp Tyr Gln Glu Met  
                     645                      650                      655  
 Leu Gln Ser Leu Ala Gln Arg Pro Ala Pro Ala Asn Thr Asn Arg Glu  
                     660                      665                      670  
 Arg Arg Pro Arg Tyr Gln His Pro Lys Gly Ala Pro Asn Ala Asp Leu  
                     675                      680                      685  
 Ile Phe Lys Thr Gly Gly Arg Arg Arg  
                     690                      695

&lt;210&gt; 3039

&lt;211&gt; 1836

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3039

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 60  
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 120  
 tcgttagaat ctctcaccct gcttctcggt ctgatctgtg caagctcagt ctcttctgag  
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 cctgcagcta cctccatccc tcatcgtagt gcaggccaaa ccaaatttta taaaattaac  
 240  
 aatttaagggt taaataagct taaataaggg tggttaaatac aagacacttc atcaaagctt  
 300  
 ctgtacaaag ataaacaaat ctggcattgt acaagtgggt ccgctggctc acagcacaca  
 360  
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 420  
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 480  
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 600  
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 660  
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 720  
 taacattaaa gtatatgtct gattatttgt tctcatgttt attttacaat actaaagccc  
 780

aaactatggt aaattgcttt acatctctac caggtcacct gatatacagg aaataaaact  
 840  
 caactatctt ccctcttgag gtaagcccaa gccagagcac tgtttttagca gagtctaaaa  
 900  
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 ttcattcttca catcggcgct gctctctgcc gtgggtaccg agaaagagtc gaggtccct  
 1020  
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 1080  
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 1140  
 ggtcccttga tgagggtcgg attggctaag attttttgc gatggtggtg aaaaaccatt  
 1200  
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 1380  
 atggagaacg ctccccagtt gtgtccatga actctttgcc actgcctgga tctacacata  
 1440  
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 1560  
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 1620  
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 1680  
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 1740  
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 1800  
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 1836

&lt;210&gt; 3040

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3040

Thr	Leu	Cys	His	Cys	Leu	Asp	Leu	His	Ile	Arg	Ala	Ala	Leu	Met	Pro
1				5					10					15	
Leu	Pro	Asp	Thr	Ala	Thr	Gly	Leu	Asp	Trp	Thr	His	Leu	Val	Asp	Ala
			20					25					30		
Ala	Arg	Ala	Phe	Glu	Asp	Gln	Arg	Val	Ala	Ser	Phe	Cys	Thr	Leu	Thr
		35				40						45			
Asp	Met	Gln	His	Gly	Gln	Asp	Leu	Glu	Gly	Ala	Gln	Glu	Leu	Pro	Leu
	50					55					60				
Cys	Val	Asp	Pro	Gly	Ser	Gly	Lys	Glu	Phe	Met	Asp	Thr	Thr	Gly	Glu
65				70					75					80	
Arg	Ser	Pro	Ser	Pro	Leu	Thr	Gly	Lys	Val	Asn	Gln	Leu	Glu	Leu	Ile

				85						90					95				
Leu	Arg	Gln	Leu	Gln	Thr	Asp	Leu	Arg	Lys	Glu	Lys	Gln	Asp	Lys	Ala				
			100						105					110					
Gly	Leu	Gln	Ala	Glu	Val	Gln	His	Leu	Arg	Gln	Asp	Asn	Met	Arg	Leu				
		115					120						125						
Gln	Glu	Glu	Ser	Gln	Thr	Ala	Thr	Ala	Gln	Leu	Arg	Lys	Leu						
	130						135					140							

&lt;210&gt; 3041

&lt;211&gt; 1512

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3041

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120
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180
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240
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360
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420
cgtgacctac tctctgagac tgcagaccct ttcttcgtcc tcaacagtga cgtgatctgc
480
gatttcccct tccaagccat ggtgcagttc caccggcacc atggccagga gggctccatc
540
ctggtgacca aggtggagga accctccaag tacgggtgtg tgggtgtgtga ggctgacaca
600
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660
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720
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780
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840
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900
gtgctggtgg acccaagtgc ccgcctcggc cagaactgca gcattggccc caatgtgagc
960
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1020
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1080
gtgggtcagt ggggtacgcat ggagaacgtg acagtgtctg gtgaggacgt catagttaat
1140
gatgagctct acctcaacgg agccagcgtg ctgccccaca agtctattgg cgagtcagtg
1200

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ccagagcctc gtatcatcat gtgaggggat gcagtggggc tggccgagcc ccggttttcc  
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 1500  
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 1512

<210> 3042

<211> 360

<212> PRT

<213> Homo sapiens

<400> 3042

Met	Lys	Ala	Leu	Ile	Leu	Val	Gly	Gly	Tyr	Gly	Thr	Arg	Leu	Arg	Pro
1				5					10					15	
Leu	Thr	Leu	Ser	Thr	Pro	Lys	Pro	Leu	Val	Asp	Phe	Cys	Asn	Lys	Pro
			20					25					30		
Ile	Leu	Leu	His	Gln	Val	Glu	Ala	Leu	Ala	Ala	Ala	Gly	Val	Asp	His
		35					40					45			
Val	Ile	Leu	Ala	Val	Ser	Tyr	Met	Ser	Gln	Val	Leu	Glu	Lys	Glu	Met
		50				55					60				
Lys	Ala	Gln	Glu	Gln	Arg	Leu	Gly	Ile	Arg	Ile	Ser	Met	Ser	His	Glu
65					70				75						80
Glu	Glu	Pro	Leu	Gly	Thr	Ala	Gly	Pro	Leu	Ala	Leu	Ala	Arg	Asp	Leu
				85				90						95	
Leu	Ser	Glu	Thr	Ala	Asp	Pro	Phe	Phe	Val	Leu	Asn	Ser	Asp	Val	Ile
			100					105					110		
Cys	Asp	Phe	Pro	Phe	Gln	Ala	Met	Val	Gln	Phe	His	Arg	His	His	Gly
		115					120					125			
Gln	Glu	Gly	Ser	Ile	Leu	Val	Thr	Lys	Val	Glu	Glu	Pro	Ser	Lys	Tyr
		130				135					140				
Gly	Val	Val	Val	Cys	Glu	Ala	Asp	Thr	Gly	Arg	Ile	His	Arg	Phe	Val
145					150					155					160
Glu	Lys	Pro	Gln	Val	Phe	Val	Ser	Asn	Lys	Ile	Asn	Ala	Gly	Met	Tyr
			165					170						175	
Ile	Leu	Ser	Pro	Ala	Val	Leu	Arg	Arg	Ile	Gln	Leu	Gln	Pro	Thr	Ser
		180					185						190		
Ile	Glu	Lys	Glu	Val	Phe	Pro	Ile	Met	Ala	Lys	Glu	Gly	Gln	Leu	Tyr
		195					200					205			
Ala	Met	Glu	Leu	Gln	Gly	Phe	Trp	Met	Asp	Ile	Gly	Gln	Pro	Lys	Asp
		210				215					220				
Phe	Leu	Thr	Gly	Met	Cys	Leu	Phe	Leu	Gln	Ser	Leu	Arg	Gln	Lys	Gln
225					230					235					240
Pro	Glu	Arg	Leu	Cys	Ser	Gly	Pro	Gly	Ile	Val	Gly	Asn	Val	Leu	Val
			245					250						255	
Asp	Pro	Ser	Ala	Arg	Ile	Gly	Gln	Asn	Cys	Ser	Ile	Gly	Pro	Asn	Val
			260				265					270			
Ser	Leu	Gly	Pro	Gly	Val	Val	Val	Glu	Asp	Gly	Val	Cys	Ile	Arg	Arg

275	280	285
Cys Thr Val Leu Arg Asp	Ala Arg Ile Arg Ser	His Ser Trp Leu Glu
290	295	300
Ser Cys Ile Val Gly Trp	Arg Cys Arg Val Gly	Gln Trp Val Arg Met
305	310	315
Glu Asn Val Thr Val Leu	Gly Glu Asp Val Ile	Val Asn Asp Glu Leu
325	330	335
Tyr Leu Asn Gly Ala Ser	Val Leu Pro His Lys	Ser Ile Gly Glu Ser
340	345	350
Val Pro Glu Pro Arg Ile	Ile Met	
355	360	

&lt;210&gt; 3043

&lt;211&gt; 394

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3043

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tctcatgatg ccagcgcttc ctcttcactg gcgtctgacc caggagcagt ccagaatcag  
120

cttctctgac ctcaactcaa ctcacgtgtc tttgacactt taagggactt cctgttttag  
180

gggtcttcttg ctgggtgtca ttgaatgggc agtgattctc taactttaga ctgatgttcc  
240

ccagcctttg tttggggact cggaggcaga gtagacagtt acccttacct ctgggttggg  
300

gagggtcata ttcttggtat cccagggagg tcaacagggg cttcattttt ctgaggggact  
360

agagggctctt gtggagctcc tgggacagag atct  
394

&lt;210&gt; 3044

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3044

Met Lys Pro Leu Leu Thr Ser Trp Gly Tyr Gln Glu Tyr Asp Pro Pro
1 5 10 15

Gln Pro Arg Gly Lys Gly Asn Cys Leu Cys Leu Arg Val Pro Lys
20 25 30

Gln Arg Leu Gly Asn Ile Ser Leu Lys Leu Glu Asn His Cys Pro Phe
35 40 45

Asn Asp Thr Gln Pro Glu Asp Pro Lys Thr Gly Ser Pro Leu Lys Cys
50 55 60

Gln Arg His Val Ser Trp Ser Glu Val Arg Glu Ala Asp Ser Gly Leu
65 70 75 80

Leu Leu Gly Gln Thr Pro Val Lys Arg Lys Arg Trp His His Glu Thr
85 90 95

Ser Ser Phe Ser Pro Cys Leu Trp Leu Lys Ala Arg Ala Ser Arg Ser
100 105 110

Lys Glu Ile
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115

&lt;210&gt; 3045

&lt;211&gt; 605

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3045

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60
gaagaaattc tttgttacia gctgctatcc atgtccaggg ccaaacaatga atcctattgc
120
tcttggggagc cgctggcttg cttatgcaga aaacaagttg attcgatgtc atcagtcctcg
180
tggtggagcc tgtggagaca acattcagtc ttatactgcc acagtcatta gtgctgctaa
240
aacattgaaa agtggcctga caatggtagg gaaagtgggtg actcagctga caggcacact
300
gccttcaggt gtgacagaag atgatgttgc catccacagt aattcacggc ggagtccttt
360
ggccccaggc atcatcacag ttattgacac cgaaaccgtg gagagggcca ggtgtttgtg
420
agtgaggatc ttgacagtga tggcattgtg gcccaacttc ctgcccata gaagccagtg
480
tgctgcatgg cttttaatac aagtggaatg cttctagtca caacagacac ccttggccat
540
gactttcatg tcttccaaat tctgactcat ccttggtcct catctacgga gagacgacaa
600
cgcgt
605

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&lt;210&gt; 3046

&lt;211&gt; 72

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3046

```

His Arg Asn Arg Gly Glu Gly Gln Val Phe Val Ser Glu Asp Leu Asp
1           5           10           15
Ser Asp Gly Ile Val Ala His Phe Pro Ala His Glu Lys Pro Val Cys
20           25           30
Cys Met Ala Phe Asn Thr Ser Gly Met Leu Leu Val Thr Thr Asp Thr
35           40           45
Leu Gly His Asp Phe His Val Phe Gln Ile Leu Thr His Pro Trp Ser
50           55           60
Ser Ser Thr Glu Arg Arg Gln Arg
65           70

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&lt;210&gt; 3047

&lt;211&gt; 391

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3047

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 120  
 ttggttgagt caggaattca gtttatggat gagccagaaa tggcagtgtt tctgcagaat  
 180  
 gccaaaaccc tgctaaaaaa aatctcggaa gcatcaaagg catttcagat ggagaaaata  
 240  
 gaacatggct atgagaacat gaaccacttc acagtcaacc tcaatagaga agaaaagata  
 300  
 atacgtgaaa ttgactttta cagagaagat gaagatgaag aagaagaaga aggcggagaa  
 360  
 ggagaaaaag aagagaagga gaagtgggag a  
 391

<210> 3048

<211> 122

<212> PRT

<213> Homo sapiens

<400> 3048

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Arg	Ala	Leu	Ile	Lys	Lys	Tyr	Ser	Asp	His	Leu	Glu	Asn	Val	Ser	Lys
			20					25					30		
Leu	Val	Glu	Ser	Gly	Ile	Gln	Phe	Met	Asp	Glu	Pro	Glu	Met	Ala	Val
			35				40						45		
Phe	Leu	Gln	Asn	Ala	Lys	Thr	Leu	Leu	Lys	Lys	Ile	Ser	Glu	Ala	Ser
			50			55					60				
Lys	Ala	Phe	Gln	Met	Glu	Lys	Ile	Glu	His	Gly	Tyr	Glu	Asn	Met	Asn
					70					75				80	
His	Phe	Thr	Val	Asn	Leu	Asn	Arg	Glu	Glu	Lys	Ile	Ile	Arg	Glu	Ile
				85					90					95	
Asp	Phe	Tyr	Arg	Glu	Asp	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Gly	Gly	Glu
			100					105					110		
Gly	Glu	Lys	Glu	Glu	Lys	Glu	Lys	Trp	Glu						
			115				120								

<210> 3049

<211> 599

<212> DNA

<213> Homo sapiens

<400> 3049

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 120  
 tttccttctc tgaacgaaag ctcggccgag gtgctcgaat acaccattaa ggaagaaaag  
 180  
 tcgatattgt acctggaagg ctcggctctt gtgtttgagg acatcttcag attgattgag  
 240  
 ttctactgtg tcagtagaga cttactgcc ttcacactgc ggctacccca ggccatcctt  
 300

gaggccagca gcttcacgga ccttgagacc atcgccaacc tgggtctggg tttctgggac  
 360  
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 420  
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 480  
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<210> 3050

<211> 177

<212> PRT

<213> Homo sapiens

<400> 3050

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Val	His	Phe	Pro	Ser	Leu	Asn	Glu	Ser	Ser	Ala	Glu	Val	Leu	Glu	Tyr
			20					25					30		
Thr	Ile	Lys	Glu	Glu	Lys	Ser	Ile	Leu	Tyr	Leu	Glu	Gly	Ser	Ala	Leu
		35				40						45			
Val	Phe	Glu	Asp	Ile	Phe	Arg	Leu	Ile	Ala	Phe	Tyr	Cys	Val	Ser	Arg
	50					55				60					
Asp	Leu	Leu	Pro	Phe	Thr	Leu	Arg	Leu	Pro	Gln	Ala	Ile	Leu	Glu	Ala
65					70					75				80	
Ser	Ser	Phe	Thr	Asp	Leu	Glu	Thr	Ile	Ala	Asn	Leu	Gly	Leu	Gly	Phe
			85					90					95		
Trp	Asp	Ser	Ser	Leu	Asn	Pro	Pro	Gln	Glu	Arg	Gly	Lys	Pro	Ala	Glu
			100					105					110		
Pro	Pro	Arg	Asp	Arg	Ala	Pro	Gly	Phe	Pro	Leu	Val	Ser	Ser	Leu	Arg
		115				120						125			
Pro	Thr	Ala	His	Asp	Ala	Asn	Cys	Ala	Cys	Glu	Ile	Glu	Leu	Ser	Val
	130					135					140				
Gly	Asn	Asp	Arg	Leu	Trp	Phe	Val	Asn	Pro	Ile	Phe	Ile	Glu	Asp	Cys
145				150					155					160	
Ser	Ser	Ala	Leu	Pro	Thr	Asp	Gln	Pro	Pro	Leu	Gly	Asn	Cys	Pro	Ser
			165					170					175		

Arg

<210> 3051

<211> 820

<212> DNA

<213> Homo sapiens

<400> 3051

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 120  
 tgaagactct caggttacca gcacaatata cccctacat tctcctcaca agggactccc  
 180

tcctcggcca ccgtcgcaca acaggcctcc tcctccccag tccctggagg gactccgaca  
 240  
 gatgcactat caccgncaac gactatgaca agtcacccat caagcccaaa atgtggagtg  
 300  
 agtcctcttt agatgaaccc tatgagaagg tcaagaagcg ctcctctcac agccattcca  
 360  
 gcagccacaa gcgcttcccc agcacaggaa gctgtgcgga agccggcgga ggaagcaact  
 420  
 ccttgacaaa cagccccatc cgcggcctcc cgcactggaa ctcccagtcc agcatgccgt  
 480  
 ccacgccaga cctgcgggtc cggagtcccc actacgtcca ttcacgagg tcggtggaca  
 540  
 tcagccccac ccgactgcac agcctcgcac tgcactttag gcaccggagc tccagcctgg  
 600  
 agtcccaggg caagctcctg ggctcggaaa acgacaccgg gagccccgac ttctacaccc  
 660  
 cgcggactcg tagcagcaac ggctcagacc ccatggacga ctgctcgtcg tgcaccagcc  
 720  
 actcgagctc ggagcactac taccggcgcg agatgaacgc caactactcc acgctggccg  
 780  
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 820

<210> 3052

<211> 62

<212> PRT

<213> Homo sapiens

<400> 3052

Arg	Leu	Ser	Gly	Tyr	Gln	His	Asn	Ile	Pro	Pro	Thr	Phe	Ser	Ser	Gln
1				5				10						15	
Gly	Thr	Pro	Ser	Ser	Ala	Thr	Val	Ala	Gln	Gln	Ala	Ser	Ser	Ser	Pro
			20					25					30		
Val	Pro	Gly	Gly	Thr	Pro	Thr	Asp	Ala	Leu	Ser	Pro	Xaa	Thr	Thr	Met
		35					40				45				
Thr	Ser	His	Pro	Ser	Ser	Pro	Lys	Cys	Gly	Val	Ser	Pro	Leu		
	50					55					60				

<210> 3053

<211> 2625

<212> DNA

<213> Homo sapiens

<400> 3053

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 120  
 cagtttaaaa gatttagaga aactgtacca acttgggata caataagaga tgaagaagat  
 180  
 gttcttgatg agctcttgca gtatttgggt gttactagtc ctgaatgctt acagagaact  
 240  
 ggaatctcac ttaatatcc tgctccacaa cctgtgtgca tttctgaaaa acaagaaaat  
 300

gatgttatta atgctatcct taagcaacat acagaagaaa aagaatttgt tgagaagcac  
360  
tttaatgact taaacatgaa agctgtggaa caagatgaac caatacctca aaaacctcag  
420  
tcagcatttt attattgcag attgcttctt agtatattgg gaatgaattc ctgggacaaa  
480  
cggaggagct ttcattctcct gaagaaaaat gaaaagctac ttagagaact taggaacttg  
540  
gattcaaggc agtgccgaga gacacacaag attgcagtat tttatgttgc tgaaggacaa  
600  
gaagacaaac actccattct caccaatata ggaggaagtc aagcatatga agattttgta  
660  
gctggtcttg gttgggaggt aaatcttaca aaccattgtg gttttatggg aggactacaa  
720  
aaaaacaaaa gcactggatt gaccactcca tatTTtgcta cctctacagt agaggtaata  
780  
tttcacgtgt caacaagaat gccttctgat tctgatgatt ctttgaccaa aaaattgaga  
840  
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900  
ggaattattc ccacagaatt tggatgatgc cttattgtaa tatatccaat gaaaaatcac  
960  
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1020  
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1080  
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1140  
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1200  
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1260  
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1320  
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1380  
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1440  
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1560  
aataatttta aataatttgt agcttaatat taaagattta agttatttat tgtttcattt  
1620  
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1680  
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1740  
gccaaaatac aattggacaa ttagtctcat tatttattgt gcccattgc aactttatgg  
1800  
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1860  
acagcaaaaag atgtacctgt taatacacag aatgtgtaca gattatttgt tatgacaata  
1920

aaacactcaa aataaatggt ctttagcatc tcaaattcca actgaaatca ttttagtatt  
 1980  
 aactcttctt cccaaagcaa tgtctcattt cttggctgtg caggatgatgc catgttatat  
 2040  
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 2160  
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 2220  
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 2280  
 tttaaaaaag aaaaaggaac ataaccagg agtctaagtt aaatctaata ttgttaatac  
 2340  
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 2400  
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 2460  
 gtactaactg catgtgtaaa tacatcatatc tggcaaaccg taaaatataa attatgtatc  
 2520  
 atcattcatg tagtatctat aatttgtaac agtggggggg aaagatgaca tgggtatttaa  
 2580  
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 2625

<210> 3054

<211> 417

<212> PRT

<213> Homo sapiens

<400> 3054

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Glu	Lys	Pro	Glu	Glu	Pro	Pro	Thr	Ser	Asn	Glu	Cys	Leu	Glu	Asp	Ile
		20						25					30		
Thr	Val	Lys	Asp	Gly	Leu	Ser	Leu	Gln	Phe	Lys	Arg	Phe	Arg	Glu	Thr
		35					40					45			
Val	Pro	Thr	Trp	Asp	Thr	Ile	Arg	Asp	Glu	Glu	Asp	Val	Leu	Asp	Glu
	50					55					60				
Leu	Leu	Gln	Tyr	Leu	Gly	Val	Thr	Ser	Pro	Glu	Cys	Leu	Gln	Arg	Thr
65				70						75				80	
Gly	Ile	Ser	Leu	Asn	Ile	Pro	Ala	Pro	Gln	Pro	Val	Cys	Ile	Ser	Glu
			85						90					95	
Lys	Gln	Glu	Asn	Asp	Val	Ile	Asn	Ala	Ile	Leu	Lys	Gln	His	Thr	Glu
			100					105					110		
Glu	Lys	Glu	Phe	Val	Glu	Lys	His	Phe	Asn	Asp	Leu	Asn	Met	Lys	Ala
	115						120					125			
Val	Glu	Gln	Asp	Glu	Pro	Ile	Pro	Gln	Lys	Pro	Gln	Ser	Ala	Phe	Tyr
	130					135					140				
Tyr	Cys	Arg	Leu	Leu	Leu	Ser	Ile	Leu	Gly	Met	Asn	Ser	Trp	Asp	Lys
145				150						155				160	
Arg	Arg	Ser	Phe	His	Leu	Leu	Lys	Lys	Asn	Glu	Lys	Leu	Leu	Arg	Glu
			165						170					175	
Leu	Arg	Asn	Leu	Asp	Ser	Arg	Gln	Cys	Arg	Glu	Thr	His	Lys	Ile	Ala



[illegible]

<210> 3055

<211> 905

<212> DNA

<213> Homo sapiens

<400> 3055

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 180  
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 240  
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 300  
 tgtcatcagg cgccgccggc accagaaaca ggacgaagag ccaagtgagg aggcagccat  
 360  
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 420  
 gagcttgatt gggggcagtg gggccggctg ggaggggcaca gccttactgc accatggcag  
 480

ctacatcaag ctgggctgcc tgcagtttgt cttcagcatc actgagtttg cgaccaaaca  
 540  
 gcccaaaggc gatgccagcc tgctgcagga tggggctcttg gccgagaagc tctctctcaa  
 600  
 gccccaccag ggccctgtgc tgcgctccaa ctctgttctt taggactggc ggctaccccg  
 660  
 ccactggcct gtacaccac ccaagactcc tgcaatgcaa aaatgtacac aaaccaagcc  
 720  
 cgggtgtttt ctatactcta ccagaaaccc ttcaactaca atctttgcat gaaatgaaga  
 780  
 aaaccttttg actgtttttt aaaaatcctt tttcttttct caagttctag ggggcatttg  
 840  
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 905

<210> 3056

<211> 195

<212> PRT

<213> Homo sapiens

<400> 3056

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Cys	Leu	Thr	Asn	Tyr	Gly	His	Cys	Asn	Tyr	Val	Ser	Gly	Lys	His	Ala
			20					25					30		
Cys	Ile	Phe	Tyr	Asp	Glu	Asn	Thr	Lys	His	Tyr	Glu	Leu	Leu	Asn	Tyr
		35					40					45			
Ser	Glu	His	Gly	Thr	Thr	Val	Asp	Asn	Val	Leu	Tyr	Ser	Cys	Asp	Phe
	50					55				60					
Ser	Glu	Lys	Thr	Pro	Pro	Thr	Pro	Pro	Ser	Ser	Ile	Val	Ala	Lys	Val
65					70				75					80	
Gln	Ser	Val	Ile	Arg	Arg	Arg	Arg	His	Gln	Lys	Gln	Asp	Glu	Glu	Pro
			85					90						95	
Ser	Glu	Glu	Ala	Ala	Met	Met	Ser	Ser	Gln	Ala	Gln	Gly	Pro	Gln	Arg
			100				105						110		
Arg	Pro	Cys	Asn	Cys	Lys	Ala	Ser	Ser	Ser	Ser	Leu	Ile	Gly	Gly	Ser
	115					120					125				
Gly	Ala	Gly	Trp	Glu	Gly	Thr	Ala	Leu	Leu	His	His	Gly	Ser	Tyr	Ile
	130					135				140					
Lys	Leu	Gly	Cys	Leu	Gln	Phe	Val	Phe	Ser	Ile	Thr	Glu	Phe	Ala	Thr
145					150				155					160	
Lys	Gln	Pro	Lys	Gly	Asp	Ala	Ser	Leu	Leu	Gln	Asp	Gly	Val	Leu	Ala
			165				170						175		
Glu	Lys	Leu	Ser	Leu	Lys	Pro	His	Gln	Gly	Pro	Val	Leu	Arg	Ser	Asn
		180					185						190		
Ser	Val	Pro													
		195													

<210> 3057

<211> 2169

<212> DNA

<213> Homo sapiens

&lt;400&gt; 3057

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120  
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180  
cggccctggg tcccagcacg ccgggcaagg aaggtgttca ctgtcatcga gcctgtggac  
240  
atcaaacacgc cagccctgct ggcacctcaa gcgggggctc gggaaaaggc tgcccgatcc  
300  
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360  
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420  
cctcgggcag ccgtggtgca gacacagacg ttcattggccc gaggcgcccg aaagcagaaa  
480  
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900  
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960  
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1080  
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1140  
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1200  
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1260  
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1320  
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1380  
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1440  
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1500  
acgttttgaa tccaccccggt ttattgtaga actggggggt cagagggcag gtgcctcaga  
1560

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 1620  
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 1680  
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 1860  
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 1980  
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 2040  
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 2160  
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 2169

<210> 3058

<211> 298

<212> PRT

<213> Homo sapiens

<400> 3058

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Ser	Val	Arg	Tyr	Cys	Ile	Lys	Ala	Thr	Leu	His	Arg	Pro	Trp	Val	Pro
		20						25					30		
Ala	Arg	Arg	Ala	Arg	Lys	Val	Phe	Thr	Val	Ile	Glu	Pro	Val	Asp	Ile
		35					40					45			
Asn	Thr	Pro	Ala	Leu	Leu	Ala	Pro	Gln	Ala	Gly	Ala	Arg	Glu	Lys	Val
	50					55				60					
Ala	Arg	Ser	Trp	Tyr	Cys	Asn	Arg	Gly	Leu	Val	Ser	Leu	Ser	Ala	Lys
65					70				75					80	
Ile	Asp	Arg	Lys	Gly	Tyr	Thr	Pro	Gly	Glu	Val	Ile	Pro	Val	Phe	Ala
			85						90					95	
Glu	Ile	Asp	Asn	Gly	Ser	Thr	Arg	Pro	Val	Leu	Pro	Arg	Ala	Ala	Val
			100					105					110		
Val	Gln	Thr	Gln	Thr	Phe	Met	Ala	Arg	Gly	Ala	Arg	Lys	Gln	Lys	Arg
		115					120					125			
Ala	Val	Val	Ala	Ser	Leu	Ala	Gly	Glu	Pro	Val	Gly	Pro	Gly	Gln	Arg
	130					135					140				
Ala	Leu	Trp	Gln	Gly	Arg	Ala	Leu	Arg	Ile	Pro	Pro	Val	Gly	Pro	Ser
145					150					155				160	
Ile	Leu	His	Cys	Arg	Val	Leu	His	Val	Asp	Tyr	Ala	Leu	Lys	Val	Cys
			165						170				175		
Val	Asp	Ile	Pro	Gly	Thr	Ser	Lys	Leu	Leu	Leu	Glu	Leu	Pro	Leu	Val
			180					185					190		
Ile	Gly	Thr	Ile	Pro	Leu	His	Pro	Phe	Gly	Ser	Arg	Ser	Ser	Ser	Val

	195		200		205										
Gly	Ser	His	Ala	Ser	Phe	Leu	Leu	Asp	Trp	Arg	Leu	Gly	Ala	Leu	Pro
	210					215					220				
Glu	Arg	Pro	Glu	Ala	Pro	Pro	Glu	Tyr	Ser	Glu	Val	Val	Ala	Asp	Thr
225					230					235				240	
Glu	Glu	Ala	Ala	Leu	Gly	Gln	Ser	Pro	Phe	Pro	Leu	Pro	Gln	Asp	Pro
				245					250					255	
Asp	Met	Ser	Leu	Glu	Gly	Pro	Phe	Phe	Ala	Tyr	Ile	Gln	Glu	Phe	Arg
			260					265					270		
Tyr	Arg	Pro	Pro	Pro	Leu	Tyr	Ser	Glu	Glu	Asp	Pro	Asn	Pro	Leu	Leu
	275						280					285			
Gly	Asp	Met	Arg	Pro	Arg	Cys	Met	Thr	Cys						
	290					295									

&lt;210&gt; 3059

&lt;211&gt; 1411

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3059

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420
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900
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1020

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<210> 3060

<211> 334

<212> PRT

<213> Homo sapiens

<400> 3060

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Lys	Lys	Lys	His	Arg	Arg	Arg	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Asp	Ser	20	25	30	
Arg	Thr	Tyr	Ser	Arg	Lys	Lys	Gly	Gly	Arg	Lys	Ser	Arg	Ser	Lys	Ser	35	40	45	
Arg	Ser	Trp	Ser	Arg	Asp	Leu	Gln	Pro	Arg	Ser	His	Ser	Tyr	Asp	Arg	50	55	60	
Arg	Arg	Arg	His	Arg	Ser	Ser	Ser	Ser	Ser	Ser	Tyr	Gly	Ser	Arg	Arg	65	70	75	80
Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Gly	Arg	Gly	Lys	Ser	Tyr	Arg	Val	85	90	95	
Gln	Arg	Ser	Arg	Ser	Lys	Ser	Arg	Thr	Arg	Arg	Ser	Arg	Ser	Arg	Pro	100	105	110	
Arg	Leu	Arg	Ser	His	Ser	Arg	Ser	Ser	Glu	Arg	Ser	Ser	His	Arg	Arg	115	120	125	
Thr	Arg	Ser	Arg	Ser	Arg	Asp	Arg	Glu	Arg	Arg	Lys	Gly	Arg	Asp	Lys	130	135	140	
Glu	Lys	Arg	Glu	Lys	Glu	Lys	Asp	Lys	Gly	Lys	Asp	Lys	Glu	Leu	His	145	150	155	160
Asn	Ile	Lys	Arg	Gly	Glu	Ser	Gly	Asn	Ile	Lys	Ala	Gly	Leu	Glu	His	165	170	175	
Leu	Pro	Pro	Ala	Glu	Gln	Ala	Lys	Ala	Arg	Leu	Gln	Leu	Val	Leu	Glu	180	185	190	
Ala	Ala	Ala	Lys	Ala	Asp	Glu	Ala	Leu	Lys	Ala	Lys	Glu	Arg	Asn	Glu	195	200	205	
Glu	Glu	Ala	Lys	Arg	Arg	Lys	Glu	Glu	Asp	Gln	Ala	Thr	Leu	Val	Glu	210	215	220	
Gln	Val	Lys	Arg	Val	Lys	Glu	Ile	Glu	Ala	Ile	Glu	Ser	Asp	Ser	Phe	225	230	235	240
Val	Gln	Gln	Thr	Phe	Arg	Ser	Ser	Lys	Glu	Val	Lys	Lys	Ser	Val	Glu	245	250	255	
Pro	Ser	Glu	Val	Lys	Gln	Ala	Thr	Ser	Thr	Ser	Gly	Pro	Ala	Ser	Ala				

	260		265		270										
Val	Ala	Asp	Pro	Pro	Ser	Thr	Glu	Lys	Glu	Ile	Asp	Pro	Thr	Ser	Ile
	275						280				285				
Pro	Thr	Ala	Ile	Lys	Tyr	Gln	Asp	Asp	Asn	Ser	Leu	Ala	His	Pro	Asn
	290					295					300				
Leu	Phe	Ile	Glu	Lys	Ala	Asp	Ala	Glu	Glu	Lys	Trp	Phe	Lys	Arg	Leu
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Ile	Ala	Leu	Arg	Gln	Glu	Arg	Leu	Met	Gly	Ser	Pro	Val	Ala		
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&lt;210&gt; 3061

&lt;211&gt; 1554

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3061

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240
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300
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1140

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<210> 3062

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3062

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Phe	Lys	Met	Leu	Gln	Glu	Asn	Arg	Glu	Gly	Arg	Ala	Ala	Pro	Arg	Gln
			20					25					30		
Ser	Ser	Ser	Phe	Arg	Leu	Leu	Gln	Glu	Ala	Leu	Glu	Ala	Glu	Glu	Arg
		35				40					45				
Gly	Gly	Thr	Pro	Ala	Phe	Leu	Pro	Ser	Ser	Leu	Ser	Pro	Gln	Ser	Ser
	50					55				60					
Leu	Pro	Ala	Ser	Arg	Ala	Leu	Ala	Thr	Pro	Pro	Lys	Leu	His	Thr	Cys
65				70					75				80		
Glu	Lys	Cys	Ser	Thr	Ser	Ile	Ala	Asn	Gln	Ala	Val	Arg	Ile	Gln	Glu
			85					90					95		
Gly	Arg	Tyr	Arg	His	Pro	Gly	Cys	Tyr	Thr	Cys	Ala	Asp	Cys	Gly	Leu
			100			105							110		
Asn	Leu	Lys	Met	Arg	Gly	His	Phe	Trp	Val	Gly	Asp	Glu	Leu	Tyr	Cys
		115				120						125			
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<210> 3063

<211> 386

<212> DNA

<213> Homo sapiens

<400> 3063

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<210> 3064  
 <211> 128  
 <212> PRT  
 <213> Homo sapiens

<400> 3064  
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 Tyr Gln Cys Ser Arg Pro Ala Pro Leu His Ser Arg Asp Leu His Ser  
 35 40 45  
 Met Ile Val Ala Ala Phe Gln Cys Leu Cys Val Trp Leu Thr Glu His  
 50 55 60  
 Pro Asp Met Leu Asp Glu Lys Asp Tyr Leu Lys Glu Val Leu Glu Ile  
 65 70 75 80  
 Val Glu Leu Gly Ile Ser Gly Ser Lys Ser Lys Asn Asn Glu Gln Glu  
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 <211> 2104  
 <212> DNA  
 <213> Homo sapiens

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2100

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2104

<210> 3066  
<211> 183  
<212> PRT  
<213> Homo sapiens

<400> 3066  
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Leu Gln Gly Glu His Ser Gln Asn Gly Glu Glu Glu Pro Glu Thr Glu  
35 40 45  
Pro Val Gly Glu Glu Ser Ile Ser Asp Ala Glu Lys Val Ala Met Xaa  
50 55 60  
Ser Gln Gly Pro Xaa Thr Ala Pro Gly Ser Pro Cys Arg Ser Cys Gly  
65 70 75 80  
Thr Cys Cys Thr Arg Gly Thr Xaa Leu Lys Ser Lys Val Phe Leu Leu  
85 90 95  
Gln Glu Glu Leu Ala Tyr Tyr Lys Ser Glu Glu Met Glu Glu Glu Asn  
100 105 110  
Arg Ile Pro Gln Pro Pro Pro Ile Ala His Pro Arg Thr Ser Pro Gln  
115 120 125  
Pro Glu Ser Gly Ile Lys Arg Leu Phe Ser Phe Phe Ser Arg Asp Lys  
130 135 140  
Lys Arg Leu Ala Asn Thr Gln Arg Asn Val His Ile Gln Glu Ser Phe  
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<210> 3067  
<211> 645  
<212> DNA  
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420

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<210> 3068

<211> 204

<212> PRT

<213> Homo sapiens

<400> 3068

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		20						25				30			
Ser	Pro	Asn	Arg	Ala	Gln	Gly	Pro	Ser	Xaa	Val	Leu	Val	His	Gln	Ala
		35					40				45				
Arg	Glu	Pro	Thr	Ala	Gly	Ser	Pro	Pro	Cys	Ser	Leu	Pro	Arg	Pro	Asp
	50					55					60				
Leu	Gln	Pro	Pro	Ser	Thr	Pro	Pro	Pro	Pro	Val	His	Lys	Glu	Gln	Lys
65					70					75				80	
Lys	Ser	Asp	Pro	Pro	Pro	Pro	Pro	Pro	Gly	Lys	Phe	Lys	Ser	Phe	Leu
			85					90					95		
Pro	Pro	Arg	Ser	Pro	Gly	Asn	Ser	Ala	Leu	Gly	Pro	Arg	Arg	Gly	Trp
		100						105				110			
Gly	Trp	Ile	Ala	Ala	Gly	Gly	Ala	Pro	Ala	Met	Pro	Arg	Pro	Pro	Ser
		115					120					125			
Gly	Ala	Gly	Asp	Arg	Glu	Ile	Pro	Arg	Asp	Leu	Ala	Cys	Ala	Pro	Tyr
	130					135				140					
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145					150				155					160	
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			165					170					175		
Ser	Pro	Ala	Glu	Glu	Glu	Pro	Pro	Pro	Val	Ser	Ala	Glu	Glu	Thr	Pro
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Pro	Ser	Pro	Ala	Pro	Pro	Pro	Arg	Gly	Glu	Trp	Gly				
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<210> 3069

<211> 1561

<212> DNA

<213> Homo sapiens

<400> 3069

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 180

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240  
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300  
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360  
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420  
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480  
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1561

&lt;210&gt; 3070

&lt;211&gt; 153

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3070

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 Leu Gly Ser Ser Val Leu His Trp Gly Tyr Leu Pro Ser Lys Asp Asp  
 35 40 45  
 Tyr Phe Gln Val Leu Cys Val Ala Asp Val Val Ile Ser Thr Ala Lys  
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 His Glu Phe Phe Gly Val Ala Met Leu Glu Ala Val Tyr Cys Gly Cys  
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 Tyr Pro Leu Cys Pro Lys Asp Leu Val Tyr Pro Glu Ile Phe Pro Ala  
 85 90 95  
 Glu Tyr Leu Tyr Ser Thr Pro Glu Gln Leu Ser Lys Arg Leu Gln Asn  
 100 105 110  
 Phe Cys Lys Arg Pro Asp Ile Ile Arg Lys His Leu Tyr Lys Gly Glu  
 115 120 125  
 Ile Ala Pro Phe Ser Trp Ala Ala Leu His Gly Lys Phe Arg Ser Leu  
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 Leu Thr Thr Glu Pro Arg Glu Asp Leu  
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&lt;210&gt; 3071

&lt;211&gt; 3343

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3071

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<210> 3072

<211> 349

<212> PRT

<213> Homo sapiens

<400> 3072

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Pro	Arg	Leu	Leu	Ser	Gly	Pro	Ser	Gln	Glu	Ser	Pro	Gln	Thr	Leu	Gly
		20						25					30		
Lys	Glu	Ser	Arg	Gly	Leu	Arg	Gln	Gly	Thr	Ser	Val	Ala	Gln	Ser	
		35					40				45				
Gly	Ala	Gln	Ala	Pro	Gly	Arg	Ala	His	Arg	Cys	Ala	His	Cys	Arg	Arg
		50				55				60					
His	Phe	Pro	Gly	Trp	Val	Ala	Leu	Trp	Leu	His	Thr	Arg	Arg	Cys	Gln
65				70					75					80	
Ala	Arg	Leu	Pro	Leu	Pro	Cys	Pro	Glu	Cys	Gly	Arg	Arg	Phe	Arg	His
			85					90					95		
Ala	Pro	Phe	Leu	Ala	Leu	His	Arg	Gln	Val	His	Ala	Ala	Ala	Thr	Pro
			100					105					110		
Asp	Leu	Gly	Phe	Ala	Cys	His	Leu	Cys	Gly	Gln	Ser	Phe	Arg	Gly	Trp



115	120	125
Val Ala Leu Val Leu His Leu Arg Ala His Ser Ala Ala Lys Arg Pro		
130	135	140
Ile Ala Cys Pro Lys Cys Glu Arg Arg Phe Trp Arg Arg Lys Gln Leu		
145	150	155
Arg Ala His Leu Arg Arg Cys His Pro Pro Ala Pro Glu Ala Arg Pro		
165	170	175
Phe Ile Cys Gly Asn Cys Gly Arg Ser Phe Ala Gln Trp Asp Gln Leu		
180	185	190
Val Ala His Lys Arg Val His Val Ala Glu Ala Leu Glu Glu Ala Ala		
195	200	205
Ala Lys Ala Leu Gly Pro Arg Pro Arg Gly Arg Pro Ala Val Thr Ala		
210	215	220
Pro Arg Pro Gly Gly Asp Ala Val Asp Arg Pro Phe Gln Cys Ala Cys		
225	230	235
Cys Gly Lys Arg Phe Arg His Lys Pro Asn Leu Ile Ala His Arg Arg		
245	250	255
Val His Thr Gly Glu Arg Pro His Gln Cys Pro Glu Cys Gly Lys Arg		
260	265	270
Phe Thr Asn Lys Pro Tyr Leu Thr Ser His Arg Arg Ile His Thr Gly		
275	280	285
Glu Lys Pro Tyr Pro Cys Lys Glu Cys Gly Arg Arg Phe Arg His Lys		
290	295	300
Pro Asn Leu Leu Ser His Ser Lys Ile His Xaa Ser Asp Pro Arg Gly		
305	310	315
Arg Pro Arg Pro Pro Pro Ala Arg Gly Ala Pro Ser Cys Gln Pro Ala		
325	330	335
Pro Arg Ser Pro Arg Pro Ser Pro Pro Arg Arg Tyr Leu		
340	345	

&lt;210&gt; 3073

&lt;211&gt; 791

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3073

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540

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<210> 3074

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3074

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Arg	Gly	His	Glu	Arg	Phe	Arg	Ile	Ala	Ser	Ala	Cys	Leu	Asp	Glu	Leu
			20					25					30		
Ser	Cys	Glu	Phe	Leu	Leu	Ala	Gly	Ala	Gly	Gly	Ala	Gly	Ala	Gly	Ala
		35					40				45				
Ala	Pro	Gly	Pro	His	Leu	Pro	Pro	Arg	Gly	Ser	Val	Pro	Gly	Asp	Pro
	50					55					60				
Val	Arg	Ile	His	Cys	Asn	Ile	Thr	Glu	Ser	Tyr	Pro	Ala	Val	Pro	Pro
65					70					75					80
Ile	Trp	Ser	Val	Glu	Ser	Asp	Asp	Pro	Asn	Leu	Ala	Ala	Val	Leu	Glu
			85					90						95	
Arg	Leu	Val	Asp	Ile	Lys	Lys	Gly	Asn	Thr	Leu	Leu	Leu	Gln	His	Leu
			100					105						110	
Lys	Arg	Ile	Ile	Ser	Asp	Leu	Cys	Lys	Leu	Tyr	Asn	Leu	Pro	Gln	His
		115				120						125			
Pro	Asp	Val	Glu	Met	Leu	Asp	Gln	Pro	Leu	Pro	Ala	Glu	Gln	Cys	Thr
	130					135					140				
Gln	Glu	Asp	Val	Ser	Ser	Glu	Asp	Glu	Asp	Glu	Glu	Met	Pro	Glu	Asp
145					150					155					160
Thr	Glu	Asp	Leu	Asp	His	Tyr	Glu	Met	Lys	Glu	Glu	Glu	Pro	Ala	Glu
			165					170						175	
Gly	Lys	Lys	Ser	Glu	Asp	Asp	Gly	Ile	Gly	Lys	Glu	Asn	Leu	Ala	Ile
			180					185					190		
Leu	Glu	Lys	Ile	Lys	Lys	Asn	Gln	Arg	Gln	Asp	Tyr	Leu	Asn	Gly	Ala
	195					200						205			
Val	Ser	Gly	Ser	Val	Gln	Ala	Thr	Asp	Arg	Leu	Met	Lys	Glu	Leu	Gln
	210					215					220				
Gly	Tyr	Ile	Thr	Xaa	Ser	Gln	Ser	Phe	Lys	Gly	Gly	Asn	Tyr	Xaa	Ser
225					230					235					240
Ser	Asn	Ser	Trp	Asn	Asp	Ser	Leu	Tyr	Gly	Trp	Asp	Val	Gln	Leu	Leu
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<210> 3075

<211> 603

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3075

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ccg
603

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&lt;210&gt; 3076

&lt;211&gt; 201

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3076

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Pro Pro Pro Pro Pro Phe Phe Ser Pro Val Gly Ala Lys Lys Lys Asn
20          25          30
Val Gly Pro Gln Lys Lys Lys Lys Lys Lys Lys Val Leu Gly Gly
35          40          45
Gly Arg Phe Gly Gln Val His Arg Cys Thr Glu Lys Ser Thr Gly Leu
50          55          60
Ala Leu Ala Ala Lys Ile Ile Lys Val Lys Asn Val Lys Asp Arg Glu
65          70          75          80
Asp Val Lys Asn Glu Val Asn Ile Met Asn Gln Leu Ser His Val Asn
85          90          95
Leu Ile Gln Leu Tyr Asp Ala Phe Glu Ser Lys Ser Ser Phe Thr Leu
100         105         110
Ile Met Glu Tyr Val Asp Gly Gly Glu Leu Phe Asp Arg Ile Thr Asp
115         120         125
Glu Lys Tyr His Leu Thr Glu Leu Asp Val Val Leu Phe Thr Arg Gln
130         135         140
Ile Cys Glu Gly Val His Tyr Leu His Gln His Tyr Ile Leu His Leu
145         150         155         160
Asp Leu Lys Pro Glu Asn Ile Leu Cys Val Ser Gln Thr Gly His Gln

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				165					170					175	
Ile	Lys	Ile	Ile	Asp	Phe	Gly	Leu	Ala	Arg	Arg	Tyr	Lys	Pro	Arg	Glu
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Lys	Leu	Lys	Val	Asn	Phe	Gly	Thr	Pro							
		195					200								

&lt;210&gt; 3077

&lt;211&gt; 1377

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3077

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1260

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<210> 3078

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3078

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Glu	Ala	Val	Gln	Ala	Leu	Arg	Glu	Arg	Leu	Gly	Val	Gly	Gly	Arg	Thr
			20					25					30		
Val	Gly	Ala	Leu	Pro	Arg	Gly	Pro	Arg	Gln	Asn	Ser	Arg	Leu	Gly	Leu
		35					40					45			
Pro	Leu	Leu	Leu	Met	Pro	Glu	Ala	Arg	Leu	Leu	Ala	Glu	Ile	Gly	
	50					55				60					
Ala	Val	Thr	Leu	Val	Ser	Ala	Pro	Arg	Pro	Asp	Ser	Arg	His	His	Ser
65					70					75					80
Leu	Ala	Leu	Thr	Ser	Phe	Lys	Arg	Gln	Gln	Glu	Glu	Ser	Phe	Gln	Glu
				85					90					95	
Gln	Ser	Ala	Leu	Ala	Ala	Glu	Ala	Arg	Glu	Thr	Arg	Arg	Gln	Glu	Leu
			100					105					110		
Leu	Glu	Lys	Ile	Thr	Glu	Gly	Gln	Ala	Ala	Lys	Lys	Gln	Lys	Leu	Glu
		115					120					125			
Gln	Ala	Ser	Gly	Ala	Ser	Ser	Ser	Gln	Glu	Ala	Gly	Ser	Ser	Gln	Ala
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Ala	Lys	Glu	Asp	Glu	Thr	Ser	Asp	Gly	Gln	Ala	Ser	Gly	Glu	Gln	Glu
145					150					155					160
Glu	Ala	Gly	Pro	Ser	Ser	Ser	Gln	Ala	Gly	Pro	Ser	Asn	Gly	Val	Ala
			165						170					175	
Pro	Leu	Pro	Arg	Ser	Ala	Leu	Leu	Val	Gln	Leu	Ala	Thr	Ala	Arg	Pro
			180					185					190		
Arg	Pro	Val	Lys	Ala	Arg	Pro	Leu	Asp	Trp	Arg	Val	Gln	Ser	Lys	Asp
		195					200					205			
Trp	Pro	His	Ala	Gly	Arg	Pro	Ala	His	Glu	Leu	Arg	Tyr	Ser	Ile	Tyr
	210					215					220				
Arg	Asp	Leu	Trp	Glu	Arg	Gly	Phe	Phe	Leu	Ser	Ala	Ala	Gly	Lys	Phe
225					230					235					240
Gly	Gly	Asp	Phe	Leu	Val	Tyr	Pro	Gly	Asp	Pro	Leu	Arg	Phe	His	Ala
			245						250					255	
His	Tyr	Ile	Ala	Gln	Cys	Trp	Ala	Pro	Glu	Asp	Thr	Ile	Pro	Leu	Gln
			260				265						270		
Asp	Leu	Val	Ala	Ala	Gly	Arg	Leu	Gly	Thr	Ser	Val	Arg	Lys	Thr	Leu
	275						280					285			
Leu	Leu	Cys	Ser	Pro	Gln	Pro	Asp	Gly	Lys	Val	Val	Tyr	Thr	Ser	Leu
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Gln	Trp	Ala	Ser	Leu	Gln										
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<210> 3079

<211> 1785

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3079

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<210> 3080

<211> 500

<212> PRT

<213> Homo sapiens

<400> 3080

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Val	Ser	Gln	Val	Gln	Pro	Pro	Pro	Ser	Lys	Ala	Ser	Ala	Pro	Glu	Pro
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Leu	Glu	Ala	Leu	Gly	Thr	Leu	Ser	Leu	Gly	Thr	Thr	Glu	Glu	Lys	Ala
65					70					75				80	
Ala	Ala	Glu	Ala	Ala	Val	Pro	Arg	Thr	Ile	Gly	Ala	Glu	Leu	Met	Glu
				85					90					95	
Leu	Val	Arg	Arg	Asn	Thr	Gly	Leu	Ser	His	Glu	Leu	Cys	Arg	Val	Ala
			100					105				110			
Ile	Gly	Ile	Ile	Val	Gly	His	Ile	Gln	Ala	Ser	Val	Pro	Ala	Ser	Ser
			115				120					125			
Pro	Val	Met	Glu	Gln	Val	Leu	Leu	Ser	Leu	Val	Glu	Gly	Lys	Asp	Leu
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Glu	Val	Ile	Phe	Ala	Asp	Leu	Ala	Arg	Arg	Lys	Asp	Asp	Ala	Gln	Gln
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Leu Ala Leu Asn Leu His Leu Pro Ala Ala Asp Gln Asn Val Ile Met				
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Ala Ala Leu Ser Lys His Ala Asn Val Lys Ile Phe Ser Glu Lys Leu				
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Leu Leu Leu Leu Asn Arg Gly Asp Asp Pro Val Arg Ile Phe Lys His				
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Gly Ser Pro Ala Thr Ala Ala Ile Phe Tyr His Thr Asp Met Met Ala				
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Lys Gly Pro Phe Gly Ala Gly Gln Arg Pro Trp Pro Gly Val Pro Arg				
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Leu Leu Glu Pro Gly Ser Thr Pro Ser Arg Glu Pro His Pro Val Glu				
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Arg Ser Gly Val Pro Ala Leu Thr Ser Ser Trp Ala Ser Gly Cys Pro				
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Arg Pro Leu His Pro Ala Leu Gln Leu Val Ile Asp Ser Ala Phe Gly				
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Gly Arg Ser Val				
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&lt;210&gt; 3081

&lt;211&gt; 1902

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3081

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&lt;210&gt; 3082

&lt;211&gt; 414

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3082

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Cys	His	Asp	Asp	Ala	Ala	Lys	Phe	Val	His	Leu	Leu	Met	Ser	Pro	Gly		
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Cys	Asn	Tyr	Leu	Val	Gln	Glu	Asp	Phe	Val	Pro	Phe	Leu	Gln	Asp	Val		
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Val	Asn	Thr	His	Pro	Gly	Leu	Ser	Phe	Leu	Lys	Glu	Ala	Ser	Glu	Phe		
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His	Ser	Arg	Tyr	Ile	Thr	Thr	Val	Ile	Gln	Arg	Ile	Phe	Tyr	Ala	Val		
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Asn	Arg	Ser	Trp	Ser	Gly	Arg	Ile	Thr	Cys	Ala	Glu	Leu	Arg	Arg	Ser		
				115	120						125						
Ser	Phe	Leu	Gln	Asn	Val	Ala	Leu	Leu	Glu	Glu	Glu	Ala	Asp	Ile	Asn		
				130	135						140						
Gln	Leu	Thr	Glu	Phe	Phe	Ser	Tyr	Glu	His	Phe	Tyr	Val	Ile	Tyr	Cys		
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Lys	Phe	Trp	Glu	Leu	Asp	Thr	Asp	His	Asp	Leu	Leu	Ile	Asp	Ala	Asp		
				165	170						175						
Asp	Leu	Ala	Arg	His	Asn	Asp	His	Ala	Leu	Ser	Thr	Lys	Met	Ile	Asp		
				180	185						190						
Arg	Ile	Phe	Ser	Gly	Ala	Val	Thr	Arg	Gly	Arg	Lys	Val	Gln	Lys	Glu		
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Phe	Gln	Asp	Cys	Leu	Cys	Gln	Met	Leu	Asp	Leu	Val	Lys	Pro	Arg	Thr		
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Glu	Gly	Lys	Ile	Thr	Leu	Gln	Asp	Leu	Lys	Arg	Cys	Lys	Leu	Ala	Asn		
				290	295						300						
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Gln	Lys	Glu	Gln	Ile	Ser	Leu	Leu	Arg	Asp	Gly	Asp	Ser	Gly	Gly	Pro		
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Glu	Leu	Ser	Asp	Trp	Glu	Lys	Tyr	Ala	Ala	Glu	Glu	Tyr	Asp	Ile	Leu		
				340	345						350						
Val	Ala	Glu	Glu	Thr	Val	Gly	Glu	Pro	Trp	Glu	Asp	Gly	Phe	Glu	Ala		
				355	360						365						
Glu	Leu	Ser	Pro	Val	Glu	Gln	Lys	Leu	Ser	Ala	Leu	Arg	Ser	Pro	Leu		
				370	375						380						
Ala	Gln	Arg	Pro	Phe	Phe	Glu	Ala	Pro	Ser	Pro	Leu	Gly	Ala	Val	Asp		
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<210> 3083

<211> 610

<212> DNA

<213> Homo sapiens

&lt;400&gt; 3083

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 610

&lt;210&gt; 3084

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3084

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			20					25					30		
Gln	Arg	Ser	Arg	Leu	His	Ala	Ala	Asp	Trp	Ala	Gly	Arg	Ala	Arg	Ala
			35					40				45			
Leu	Val	Gly	Asp	Ser	His	Thr	Ser	Trp	Ser	Pro	Ala	Ser	Ile	Pro	Gly
			50			55					60				
Lys	His	Tyr	Gln	Ala	Val	Gly	Leu	His	Leu	Trp	Lys	Val	Glu	Lys	Arg
65					70					75				80	
Arg	Val	Asn	Leu	Pro	Arg	Val	Leu	Ser	Met	Pro	Pro	Val	Ala	Gly	Thr
				85					90					95	
Ala	Cys	His	Ala	Tyr	Asp	Arg	Glu	Val	His	Leu	Arg	Cys	Glu	Leu	Ser
			100					105					110		
Pro	Gly	Tyr	Tyr	Leu	Ala	Val	Pro	Ser	Thr	Phe	Leu	Lys	Asp	Ala	Pro
			115					120					125		
Gly	Glu	Phe	Leu	Leu	Arg	Val	Phe	Ser	Thr	Gly	Arg	Val	Ser	Leu	Arg
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&lt;210&gt; 3085

&lt;211&gt; 1080

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3085

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 1080

&lt;210&gt; 3086

&lt;211&gt; 58

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3086

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 Thr Pro Ala Leu Trp Glu Ala Glu Ala Gly Gly Ser Arg Gly Gln Glu  
 35 40 45  
 Ile Glu Thr Ile Leu Ala Asn Thr Val Lys  
 50 55

&lt;210&gt; 3087

&lt;211&gt; 2329

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3087

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 2280  
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 2329

&lt;210&gt; 3088

&lt;211&gt; 280

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3088

Xaa Glu Lys His Leu Asp Asp Glu Glu Arg Arg Lys Arg Lys Glu Glu  
 1 5 10 15  
 Lys Lys Arg Lys Arg Glu Arg Glu His Cys Asp Thr Glu Gly Glu Ala  
 20 25 30  
 Asp Asp Phe Asp Pro Gly Lys Lys Val Glu Val Glu Pro Pro Pro Asp  
 35 40 45  
 Arg Pro Val Arg Ala Cys Arg Thr Gln Gln Pro Glu Met Glu Arg Thr  
 50 55 60  
 His Ile Gln Gln Leu Leu Glu His Phe Leu Arg Gln Leu Gln Arg Lys  
 65 70 75 80  
 Asp Pro His Gly Phe Phe Ala Phe Pro Val Thr Asp Ala Ile Ala Pro  
 85 90 95  
 Gly Tyr Ser Met Ile Ile Lys His Pro Met Asp Phe Gly Thr Met Lys  
 100 105 110  
 Asp Lys Ile Val Ala Asn Glu Tyr Lys Ser Val Thr Glu Phe Lys Ala  
 115 120 125  
 Asp Phe Lys Leu Met Cys Asp Asn Ala Met Thr Tyr Asn Arg Pro Asp

130		135		140
Thr Val Tyr Tyr Lys	Leu Ala Lys Lys Ile Leu His Ala Gly Phe Lys			
145	150	155	160	
Met Met Ser Lys Gln Ala Ala Leu Leu Gly Asn Glu Asp Thr Ala Val				
	165	170	175	
Glu Glu Pro Val Pro Glu Val Val Pro Val Gln Val Glu Thr Ala Lys				
	180	185	190	
Lys Ser Lys Lys Pro Ser Arg Glu Val Ile Ser Cys Met Phe Glu Pro				
	195	200	205	
Glu Gly Asn Ala Cys Ser Leu Thr Asp Ser Thr Ala Glu Glu His Val				
	210	215	220	
Leu Ala Leu Val Glu His Ala Ala Asp Glu Ala Arg Asp Arg Ile Asn				
225	230	235	240	
Arg Phe Leu Pro Gly Gly Lys Met Gly Tyr Leu Lys Arg Asn Gly Asp				
	245	250	255	
Gly Ser Leu Leu Tyr Ser Val Val Asn Thr Ala Glu Pro Asn Ala Asp				
	260	265	270	
Glu Glu Glu Thr His Pro Val Thr				
	275	280		

&lt;210&gt; 3089

&lt;211&gt; 722

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3089

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ncagcttttg accaagcgac catgagaggg ccagagctcg ggcccgaac cagcatggag
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ggagacgtgc tggacacact ggaggcgctg gggataaaag gaccattggt agaagagcaa
120
gcccttacaa aggcggcaga ggggtggatta tcttcacctg aattttcaga gctctgtatt
180
tggttaggct ctcaaataaa atcattatgc aacttggag aaagtatcac gtctgctggg
240
agagatgacc tagagagctt ccagcttgag ataagtgggt ttttaaaga gatggcctgt
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420
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540
gtggaatcaa aggtgaaaga tattctctca aaggtccaga aaaatcatgt gggaaaacca
600
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720
ca
722

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&lt;210&gt; 3090

&lt;211&gt; 240

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3090

```

Xaa Ala Leu Asp Gln Ala Thr Met Arg Gly Pro Glu Leu Gly Pro Glu
 1           5           10           15
Thr Ser Met Glu Gly Asp Val Leu Asp Thr Leu Glu Ala Leu Gly Tyr
      20           25           30
Lys Gly Pro Leu Leu Glu Glu Gln Ala Leu Thr Lys Ala Ala Glu Gly
      35           40           45
Gly Leu Ser Ser Pro Glu Phe Ser Glu Leu Cys Ile Trp Leu Gly Ser
      50           55           60
Gln Ile Lys Ser Leu Cys Asn Leu Glu Glu Ser Ile Thr Ser Ala Gly
65           70           75           80
Arg Asp Asp Leu Glu Ser Phe Gln Leu Glu Ile Ser Gly Phe Leu Lys
      85           90           95
Glu Met Ala Cys Pro Tyr Ser Val Leu Val Ser Gly Asp Ile Lys Glu
      100          105          110
Arg Leu Thr Lys Lys Asp Asp Cys Leu Lys Leu Leu Leu Phe Leu Ser
      115          120          125
Thr Glu Leu Gln Ala Leu Gln Ile Leu Gln Asn Lys Lys His Lys Asn
      130          135          140
Ser Gln Leu Asp Lys Asn Ser Glu Val Tyr Gln Glu Val Gln Ala Met
145          150          155          160
Phe Asp Thr Leu Gly Ile Pro Lys Ser Thr Thr Ser Asp Ile Pro His
      165          170          175
Met Leu Asn Gln Val Glu Ser Lys Val Lys Asp Ile Leu Ser Lys Val
      180          185          190
Gln Lys Asn His Val Gly Lys Pro Leu Leu Lys Met Asp Leu Asn Ser
      195          200          205
Glu Gln Ala Glu Gln Leu Glu Arg Ile Asn Asp Ala Leu Ser Cys Glu
      210          215          220
Tyr Glu Cys Arg Arg Arg Met Leu Met Lys Arg Leu Asp Val Thr Val
225          230          235          240

```

&lt;210&gt; 3091

&lt;211&gt; 333

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3091

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acgcgtgaag ggggcggagg ggaaggaagc cctggggagc agctgctcac ccctttgcca
60
caccatcttg gcctggcagg ggtctgggac tgacagggag caccacaggc ccttggtacc
120
cccagggcga ccccttctgc caagtgtccc aaaatgattg ctaaatgcct ggctccccc
180
ctctttgact ccattctctg gttccctctt tctgctgcca gctccccga ctcttccttg
240
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300
ttccataccc atccctgcct cctgctcgg ccg
333

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<210> 3092  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 3092  
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 20 25 30  
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 35 40 45  
 Ala Phe Ser Asn His Phe Gly Thr Leu Gly Arg Arg Gly Arg Pro Gly  
 50 55 60  
 Gly Thr Lys Gly Leu Gly Cys Ser Leu Ser Val Pro Asp Pro Cys Gln  
 65 70 75 80  
 Ala Lys Met Val Trp Gln Arg Gly Glu Gln Leu Leu Pro Arg Ala Ser  
 85 90 95  
 Phe Pro Ser Ala Pro Phe Thr Arg  
 100

<210> 3093  
 <211> 720  
 <212> DNA  
 <213> Homo sapiens

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 120  
 agggggcagc ctgtgggcag tgactctgtc tgtctttgga caggacaagg actgccatcc  
 180  
 accatggtga agctgggctg cagcttctct gggaagccag gtaaagaccc tggggaccag  
 240  
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 300  
 ccgccactcc ctgaccaggt ggtcatcaag acacagacag aataccagct gtctctccca  
 360  
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 420  
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 480  
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 540  
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 600  
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<210> 3094

<211> 179  
 <212> PRT  
 <213> Homo sapiens

<400> 3094

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Gly Asp Gln Asp Gly Ala Ala Met Asp Ser Val Pro Leu Ile Ser Pro
          20           25           30
Leu Asp Ile Ser Gln Leu Gln Pro Leu Pro Asp Gln Val Val Ile
      35           40           45
Lys Thr Gln Thr Glu Tyr Gln Leu Ser Ser Pro Asp Gln Gln Asn Phe
 50           55           60
Pro Asp Leu Glu Gly Gln Arg Leu Asn Cys Ser His Pro Glu Glu Gly
65           70           75           80
Arg Arg Leu Pro Thr Ala Arg Met Ile Ala Phe Ala Met Ala Leu Leu
          85           90           95
Gly Cys Val Leu Ile Met Tyr Lys Ala Ile Trp Tyr Asp Gln Phe Thr
      100           105           110
Cys Pro Asp Gly Phe Leu Leu Arg His Lys Ile Cys Thr Pro Leu Thr
      115           120           125
Leu Glu Met Tyr Tyr Thr Glu Met Asp Pro Glu Arg His Arg Ser Ile
      130           135           140
Leu Ala Ala Ile Gly Ala Tyr Pro Leu Ser Arg Lys His Gly Thr Glu
145           150           155           160
Thr Pro Ala Ala Trp Gly Asp Gly Tyr Arg Ala Ala Lys Glu Glu Arg
          165           170           175
Lys Gly Pro
  
```

<210> 3095  
 <211> 519  
 <212> DNA  
 <213> Homo sapiens

<400> 3095

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agaccccgagc agcaggcctc agctcatgtg actcggccct ctaagaggcc cagcaagata
120
gggtttgacg aggtctttgt catcagcctg gctcgcaggc ctgaccgtcg ggaacgcatg
180
ctcgctcgc tctgggagat ggagatctct gggagggtgg tggatgctgt ggatggctgg
240
atgctcaaca gcagtgccat caggaacctc ggcgtagacc tgctcccggt ctaccaggac
300
ccttactcgg gccgcactct gaccaagggc gaggtgggct gcttctcag ccattactcc
360
atctgggaag agcgagcagt acaaggcaca cttctggcca cgggacctgg tggccttctc
420
cgccccagccc ctgctcgtg cccctaccca ctatgccggg gacgccgagt ggctcagtga
480
cacggagaca tcctctccat gggatgatgc cagcggccg
519
  
```

&lt;210&gt; 3096

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3096

```

Gly Gly Ile Ser Pro Ala His Ser Cys Thr His Ser Gly Ala His Cys
 1           5           10           15
Thr Arg Gly Arg Arg Pro Gln Gln Gln Ala Ser Ala His Val Thr Arg
          20           25           30
Pro Ser Lys Arg Pro Ser Lys Ile Gly Phe Asp Glu Val Phe Val Ile
          35           40           45
Ser Leu Ala Arg Arg Pro Asp Arg Arg Glu Arg Met Leu Ala Ser Leu
          50           55           60
Trp Glu Met Glu Ile Ser Gly Arg Val Val Asp Ala Val Asp Gly Trp
65           70           75           80
Met Leu Asn Ser Ser Ala Ile Arg Asn Leu Gly Val Asp Leu Leu Pro
          85           90           95
Gly Tyr Gln Asp Pro Tyr Ser Gly Arg Thr Leu Thr Lys Gly Glu Val
          100          105          110
Gly Cys Phe Leu Ser His Tyr Ser Ile Trp Glu Glu Arg Ala Val Gln
          115          120          125
Gly Thr Leu Leu Ala Thr Gly Pro Gly Gly Leu Leu Arg Pro Ala Pro
          130          135          140
Ala Arg Cys Pro Tyr Pro Leu Cys Arg Gly Arg Val Ala Gln
145           150           155

```

&lt;210&gt; 3097

&lt;211&gt; 4953

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3097

```

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120
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360
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480
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540
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600

```

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660  
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720  
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960  
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<210> 3098

<211> 1359

<212> PRT

<213> Homo sapiens

<400> 3098

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His	Gly	Ser	Arg	Gly	Gly	Arg	Gly	Asp	Arg	Ala	Arg	Ala	Gly	Gly	Gly
			20					25					30		
Gly	Pro	Ser	Arg	Gly	Ser	Gly	Gly	Gly	Arg	Gly	Gly	Leu	Arg	Ala	
			35					40				45			
Asp	Gly	Arg	Ala	Pro	Gly	Leu	Arg	Gly	Leu	Gly	Ala	Ala	Pro	His	Cys
	50					55					60				
Pro	Ala	Gly	Leu	Gly	Pro	Gly	Ala	Met	Ser	Gly	Gly	Gly	Gly	Gly	Gly

65					70					75				80
Gly	Ser	Ala	Pro	Ser	Arg	Phe	Ala	Asp	Tyr	Phe	Val	Ile	Cys	Gly
				85					90					95
Asp	Thr	Glu	Thr	Gly	Leu	Glu	Pro	Asp	Glu	Leu	Ser	Ala	Leu	Cys
			100					105					110	
Tyr	Ile	Gln	Ala	Ser	Lys	Ala	Arg	Asp	Gly	Ala	Ser	Pro	Phe	Ile
	115						120					125		
Ser	Thr	Thr	Glu	Gly	Glu	Asn	Phe	Glu	Gln	Thr	Pro	Leu	Arg	Arg
	130					135					140			
Phe	Lys	Ser	Lys	Val	Leu	Ala	Arg	Tyr	Pro	Glu	Asn	Val	Glu	Trp
145					150					155				160
Pro	Phe	Asp	Gln	Asp	Ala	Val	Gly	Met	Leu	Cys	Met	Pro	Lys	Gly
				165					170					175
Ala	Phe	Lys	Thr	Gln	Ala	Asp	Pro	Arg	Glu	Pro	Gln	Phe	His	Ala
			180					185					190	
Ile	Ile	Thr	Arg	Glu	Asp	Gly	Ser	Arg	Thr	Phe	Gly	Phe	Ala	Leu
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Phe	Tyr	Glu	Glu	Val	Thr	Ser	Lys	Gln	Ile	Cys	Ser	Ala	Met	Gln
	210					215					220			
Leu	Tyr	His	Met	His	Asn	Ala	Glu	Tyr	Asp	Val	Leu	His	Ala	Pro
225					230					235				240
Ala	Asp	Asp	Arg	Asp	Gln	Ser	Ser	Met	Glu	Asp	Gly	Glu	Asp	Thr
				245					250					255
Val	Thr	Lys	Leu	Gln	Arg	Phe	Asn	Ser	Tyr	Asp	Ile	Ser	Arg	Asp
			260					265					270	
Leu	Tyr	Val	Ser	Lys	Cys	Ile	Cys	Leu	Ile	Thr	Pro	Met	Ser	Phe
	275						280					285		
Lys	Ala	Cys	Arg	Ser	Val	Pro	Gly	Gln	Leu	His	Gln	Ala	Val	Thr
	290					295					300			
Pro	Gln	Pro	Pro	Pro	Leu	Pro	Leu	Glu	Ser	Tyr	Ile	Tyr	Asn	Val
305					310					315				320
Tyr	Glu	Val	Pro	Leu	Pro	Pro	Pro	Gly	Arg	Ser	Leu	Lys	Phe	Ser
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Val	Tyr	Trp	Pro	Ile	Ile	Cys	Gln	Arg	Pro	Ser	Thr	Asn	Glu	Leu
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Leu	Phe	Asp	Phe	Pro	Val	Lys	Glu	Val	Phe	Glu	Leu	Leu	Gly	Val
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Thr	Ala	Leu	Met	Phe	Pro	Phe	Gln	Trp	Gln	His	Val	Tyr	Val	Pro
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Leu	Pro	Ala	Ser	Leu	Leu	His	Phe	Leu	Asp	Ala	Pro	Val	Pro	Tyr
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Met	Gly	Leu	His	Ser	Asn	Gly	Leu	Asp	Asp	Arg	Ser	Lys	Leu	Glu
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Pro	Gln	Glu	Ala	Asn	Leu	Cys	Phe	Val	Asp	Ile	Asp	Asn	His	Phe
	450					455					460			
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Gln	Glu	Val	Ser	Glu	Ile	Leu	Met	Ala	Phe	Gly	Ile	Pro	Pro	Glu
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Asn	Leu	His	Cys	Ser	Glu	Ser	Ala	Ser	Lys	Leu	Lys	Arg	Leu	Arg

			500					505					510				
Ser	Glu	Leu	Val	Ser	Asp	Lys	Arg	Asn	Gly	Asn	Ile	Ala	Gly	Ser	Pro		
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Leu	His	Ser	Tyr	Glu	Leu	Leu	Lys	Glu	Asn	Glu	Thr	Ile	Ala	Arg	Leu		
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Gln	Ala	Leu	Val	Lys	Arg	Thr	Gly	Val	Ser	Leu	Glu	Lys	Leu	Glu	Val		
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Arg	Glu	Asp	Pro	Ser	Ser	Asn	Lys	Asp	Leu	Lys	Val	Gln	Cys	Asp	Glu		
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Glu	Glu	Leu	Arg	Ile	Tyr	Gln	Leu	Asn	Ile	Gln	Ile	Arg	Glu	Val	Phe		
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Ala	Asn	Arg	Phe	Thr	Gln	Met	Phe	Ala	Asp	Tyr	Glu	Val	Phe	Val	Ile		
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Gln	Pro	Ser	Gln	Asp	Lys	Glu	Ser	Trp	Phe	Thr	Asn	Arg	Glu	Gln	Met		
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Gln	Asn	Phe	Asp	Lys	Ala	Ser	Phe	Leu	Ser	Asp	Gln	Pro	Glu	Pro	Tyr		
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Leu	Pro	Phe	Leu	Ser	Arg	Phe	Leu	Glu	Thr	Gln	Met	Phe	Ala	Phe	Phe		
			645						650					655			
Ile	Asp	Asn	Lys	Ile	Met	Cys	His	Asp	Asp	Asp	Asp	Lys	Asp	Pro	Val		
		660						665				670					
Leu	Arg	Val	Phe	Asp	Ser	Arg	Val	Asp	Lys	Ile	Arg	Leu	Leu	Asn	Val		
		675					680					685					
Arg	Thr	Pro	Thr	Leu	Arg	Thr	Ser	Met	Tyr	Gln	Lys	Cys	Thr	Thr	Val		
	690					695					700						
Asp	Glu	Ala	Glu	Lys	Ala	Ile	Glu	Leu	Arg	Leu	Ala	Lys	Ile	Asp	His		
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Thr	Ala	Ile	His	Pro	His	Leu	Leu	Asp	Met	Lys	Ile	Gly	Gln	Gly	Lys		
			725						730					735			
Tyr	Glu	Pro	Gly	Phe	Phe	Pro	Lys	Leu	Gln	Ser	Asp	Val	Leu	Cys	Thr		
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Gly	Pro	Ala	Ser	Asn	Lys	Trp	Thr	Lys	Arg	Asn	Ala	Pro	Ala	Gln	Trp		
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Arg	Arg	Lys	Asp	Arg	Gln	Lys	Gln	His	Thr	Glu	His	Leu	Arg	Leu	Asp		
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			805						810					815			
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		820						825					830				
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Gln	Val	Lys	Gln	Gly	Lys	Ser	Ala	Leu	Trp	Ser	His	Leu	Leu	His	Tyr		
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Gln	Asp	Asn	Arg	Gln	Arg	Lys	Leu	Thr	Ser	Gly	Ser	Leu	Ser	Thr	Ser		
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Met	Pro	Pro	Leu	Arg	Ile	Ser	Leu	Ile	Gln	Asp	Met	Arg	His	Ile	Gln		



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Arg Leu Ser Met Glu Lys Lys Leu Leu Ser Arg His Leu Lys Gln Leu		
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Leu Ser Asp His Glu Leu Thr Lys Lys Leu Tyr Lys Arg Tyr Ala Phe		
	980	985
Leu Arg Cys Asp Asp Glu Lys Glu Gln Phe Leu Tyr His Leu Leu Ser		
	995	1000
Phe Asn Ala Val Asp Tyr Phe Cys Phe Thr Asn Val Phe Thr Thr Ile		
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Leu Ile Pro Tyr His Ile Leu Ile Val Pro Ser Lys Lys Leu Gly Gly		
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Ser Met Phe Thr Ala Asn Pro Trp Ile Cys Ile Ser Gly Glu Leu Gly		
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Glu Thr Gln Ile Met Gln Ile Pro Arg Asn Val Leu Glu Met Thr Phe		
	1060	1065
Glu Cys Gln Asn Leu Gly Lys Leu Thr Thr Val Gln Ile Gly His Asp		
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Asn Ser Gly Leu Tyr Ala Lys Trp Leu Val Glu Tyr Val Met Val Arg		
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Ser Ala Leu Glu Gln Ala Phe Gln His Gly Phe Lys Ser Pro Arg Leu		
	1220	1225
Phe Lys Asn Val Phe Ile Trp Asp Phe Leu Glu Lys Ala Gln Thr Tyr		
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Tyr Glu Thr Leu Glu Lys Asn Glu Val Val Pro Glu Glu Asn Trp His		
	1250	1255
Thr Arg Ala Arg Asn Phe Cys Arg Phe Val Thr Ala Ile Asn Asn Thr		
1265	1270	1275
Pro Arg Asn Ile Gly Lys Asp Gly Lys Phe Gln Met Leu Val Cys Leu		
	1285	1290
Gly Ala Arg Asp His Leu Leu His His Trp Ile Ala Leu Leu Ala Asp		
	1300	1305
Cys Pro Ile Thr Ala His Met Tyr Glu Asp Val Ala Leu Ile Lys Asp		
	1315	1320
His Thr Leu Val Asn Ser Leu Ile Arg Val Leu Gln Thr Leu Gln Glu		
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 <212> DNA  
 <213> Homo sapiens

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 Phe Thr Leu Pro Phe Trp Ala Val Asn Ala Val His Gly Trp Val Leu  
 35 40 45  
 Gly Lys Ile Met Cys Lys Ile Thr Ser Ala Leu Tyr Thr Leu Asn Phe

50	55	60
Val Ser Gly Met Gln Phe Leu Ala Cys Ile Ser Ile Asp Arg Tyr Val		
65	70	75
Ala Val Thr Lys Val Pro Ser Gln Ser Gly Val Gly Lys Pro Cys Trp		80
	85	90
Ile Ile Cys Phe Cys Val Trp Met Ala Ala Ile Leu Leu Ser Ile Pro		95
	100	105
Gln Leu Val Phe Tyr Thr Val Asn Asp Asn Ala Arg Cys Ile Pro Ile		110
	115	120
Phe Pro Arg Tyr Leu Gly Thr Ser Met Lys Ala Leu Ile His Met Leu		125
	130	135
Glu Ile Cys Ile Gly Phe Val Val Pro Phe Leu Ile Met Gly Val		140
145	150	155

&lt;210&gt; 3101

&lt;211&gt; 2623

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3101

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<210> 3102  
 <211> 410  
 <212> PRT  
 <213> Homo sapiens

<400> 3102

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			20					25					30		
Gln	Tyr	Ala	Gly	Pro	Gly	Leu	Ser	Leu	Gly	Ala	Pro	Gly	Gly	Arg	Ala
		35					40					45			
Pro	Pro	Asp	Asp	Leu	Asp	Leu	Phe	Pro	Thr	Pro	Asp	Pro	His	Tyr	Glu
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Lys	Lys	Tyr	Tyr	Phe	Pro	Val	Arg	Glu	Leu	Glu	Arg	Ser	Leu	Arg	Phe
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Asp	Met	Lys	Gly	Asp	Asp	Val	Ile	Val	Phe	Leu	His	Ile	Gln	Lys	Thr
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Gly	Gly	Thr	Thr	Phe	Gly	Arg	His	Leu	Val	Gln	Asn	Val	Arg	Leu	Glu
			100					105					110		
Val	Pro	Cys	Asp	Cys	Arg	Pro	Gly	Gln	Lys	Lys	Cys	Thr	Cys	Tyr	Arg
		115					120					125			
Pro	Asn	Arg	Arg	Glu	Thr	Trp	Leu	Phe	Ser	Arg	Phe	Ser	Thr	Gly	Trp
	130					135					140				
Ser	Cys	Gly	Leu	His	Ala	Asp	Trp	Thr	Glu	Leu	Thr	Asn	Cys	Val	Pro
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Gly	Val	Leu	Asp	Arg	Arg	Asp	Ser	Ala	Ala	Leu	Arg	Thr	Pro	Arg	Lys
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Phe	Tyr	Tyr	Ile	Thr	Leu	Leu	Arg	Asp	Pro	Val	Ser	Arg	Tyr	Leu	Ser
			180					185					190		
Glu	Trp	Arg	His	Val	Gln	Arg	Gly	Ala	Thr	Trp	Lys	Thr	Ser	Leu	His
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Met	Cys	Asp	Gly	Arg	Thr	Pro	Thr	Pro	Glu	Glu	Leu	Pro	Pro	Cys	Tyr
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Glu	Gly	Thr	Asp	Trp	Ser	Gly	Cys	Thr	Leu	Gln	Glu	Phe	Met	Asp	Cys
225					230					235					240
Pro	Tyr	Asn	Leu	Ala	Asn	Asn	Arg	Gln	Val	Arg	Met	Leu	Ala	Asp	Leu
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		260					265						270		
Ala	Gln	Leu	Leu	Leu	Glu	Ser	Ala	Lys	Lys	Asn	Leu	Arg	Gly	Met	Ala
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	290					295					300				
Arg	Thr	Phe	Asn	Leu	Lys	Phe	Ile	Arg	Pro	Phe	Met	Gln	Tyr	Asn	Ser
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Thr	Arg	Ala	Gly	Gly	Val	Glu	Val	Asp	Glu	Asp	Thr	Ile	Arg	Arg	Ile
			325					330						335	
Glu	Glu	Leu	Asn	Asp	Leu	Asp	Met	Gln	Leu	Tyr	Asp	Tyr	Ala	Lys	Asp
		340					345						350		
Leu	Phe	Gln	Arg	Tyr	Gln	Tyr	Lys	Arg	Gln	Leu	Glu	Arg	Arg	Glu	
	355					360					365				
Gln	Arg	Leu	Arg	Ser	Arg	Glu	Glu	Arg	Leu	Leu	His	Arg	Ala	Lys	Glu

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385	390	395
Asp Tyr Met Ser His Ile Ile Glu Lys Trp		400
405	410	

&lt;210&gt; 3103

&lt;211&gt; 1228

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3103

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 Pro Gly Gly Arg Leu Arg Thr Arg Arg Pro Ala Thr Ile Leu Ser Val  
 35 40 45  
 Ala Ala Ala Trp Gln Arg Ala Ser Leu Gly Gln Trp Xaa Arg Arg Pro  
 50 55 60  
 Val Ala Ala Leu Ala Pro Tyr Ser Asp Ser Leu Val Glu Pro Leu Val  
 65 70 75 80  
 Cys Arg Leu Gln Val Leu Phe Leu Lys Lys Ala Gly Ser Glu Arg Pro  
 85 90 95  
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Gln Lys His Phe Pro Ser	Thr Lys Arg Lys Arg	Asp Arg Gly Ala Gly
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<210> 3108

<211> 517

<212> PRT

<213> Homo sapiens

<400> 3108

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			20					25					30		
Pro	Lys	His	Trp	Thr	Lys	Glu	Arg	His	Gln	Phe	Leu	Met	Glu	Leu	Lys
		35					40					45			
Gln	Glu	Ala	Leu	Thr	Phe	Ala	Arg	Asn	Trp	Gly	Ala	Asp	Tyr	Ile	Leu
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Phe	Ala	Asp	Thr	Asp	Asn	Ile	Leu	Thr	Asn	Asn	Gln	Thr	Leu	Arg	Leu
65					70					75				80	
Leu	Met	Gly	Gln	Gly	Leu	Pro	Val	Val	Ala	Pro	Met	Leu	Asp	Ser	Gln
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Thr	Tyr	Tyr	Ser	Asn	Phe	Trp	Cys	Gly	Ile	Thr	Pro	Gln	Gly	Tyr	Tyr
			100					105					110		
Arg	Arg	Thr	Ala	Glu	Tyr	Phe	Pro	Thr	Lys	Asn	Arg	Gln	Arg	Arg	Gly
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Cys	Phe	Arg	Val	Pro	Met	Val	His	Ser	Thr	Phe	Leu	Ala	Ser	Leu	Arg
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			165						170					175	
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Phe	Ile	His	Leu	Ile	Leu	Glu	Ala	Leu	Val	Asp	Gly	Pro	Arg	Met	Gln	
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Ala	Ser	Ala	His	Val	Thr	Arg	Pro	Ser	Lys	Arg	Pro	Ser	Lys	Ile	Gly	
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Glu	Arg	Met	Leu	Ala	Ser	Leu	Trp	Glu	Met	Glu	Ile	Ser	Gly	Arg	Val	
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Thr	Leu	Thr	Lys	Gly	Glu	Val	Gly	Cys	Phe	Leu	Ser	His	Tyr	Ser	Ile	
305					310					315					320	
Trp	Glu	Glu	Val	Val	Ala	Arg	Gly	Leu	Ala	Arg	Val	Leu	Val	Phe	Glu	
				325					330					335		
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Pro	Gly	Leu	Val	Val	Ala	Gly	Tyr	Ser	Tyr	Trp	Thr	Leu	Ala	Tyr	Ala	
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				405					410					415		
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			420				425					430				
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		435				440						445				
Phe	Ser	Ala	Gln	Pro	Leu	Leu	Ala	Ala	Pro	Thr	His	Tyr	Ala	Gly	Asp	
	450					455					460					
Ala	Glu	Trp	Leu	Ser	Asp	Thr	Glu	Thr	Ser	Ser	Pro	Trp	Asp	Asp	Asp	
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Ser	Gly	Arg	Leu	Ile	Ser	Trp	Ser	Gly	Ser	Gln	Lys	Thr	Leu	Arg	Ser	
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Pro	Arg	Leu	Asp	Leu	Thr	Gly	Ser	Ser	Gly	His	Ser	Leu	Gln	Pro	Gln	
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<210> 3109

<211> 959

<212> DNA

<213> Homo sapiens

<400> 3109

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120
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<210> 3110

<211> 207

<212> PRT

<213> Homo sapiens

<400> 3110

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			20					25					30		
Trp	Ser	Pro	Asp	Gly	Arg	His	Ile	Leu	Asn	Thr	Thr	Glu	Phe	His	Leu
		35					40					45			
Arg	Ile	Thr	Val	Trp	Ser	Leu	Cys	Thr	Lys	Ser	Val	Ser	Tyr	Ile	Lys
	50					55					60				
Tyr	Pro	Lys	Ala	Cys	Leu	Gln	Gly	Ile	Thr	Phe	Thr	Arg	Asp	Gly	Arg
65					70					75				80	
Tyr	Met	Ala	Leu	Ala	Glu	Arg	Arg	Asp	Cys	Lys	Asp	Tyr	Val	Ser	Ile
				85					90					95	
Phe	Val	Cys	Ser	Asp	Trp	Gln	Leu	Leu	Arg	His	Phe	Asp	Thr	Asp	Thr
			100						105				110		
Gln	Asp	Leu	Thr	Gly	Ile	Glu	Trp	Ala	Pro	Asn	Gly	Cys	Val	Leu	Ala
		115					120					125			
Val	Trp	Asp	Thr	Cys	Leu	Glu	Tyr	Lys	Ile	Leu	Leu	Tyr	Ser	Leu	Asp
	130						135					140			
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145		150		155		160									
Ile	Lys	Ser	Val	Ala	Trp	Ser	Pro	Ser	Ser	Gln	Phe	Leu	Ala	Val	Gly
		165		170		175									
Ser	Tyr	Asp	Gly	Lys	Val	Arg	Ile	Leu	Asn	His	Val	Thr	Trp	Lys	Met
		180		185		190									
Ile	Thr	Glu	Phe	Gly	His	Pro	Cys	Ser	Pro	Ile	Asn	Asp	Ser	Gln	
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&lt;210&gt; 3111

&lt;211&gt; 1269

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3111

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1269

<210> 3112

<211> 151

<212> PRT

<213> Homo sapiens

<400> 3112

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		20					25					30			
Glu	Gly	Arg	Arg	Gly	Ala	Arg	Thr	Ala	Gly	Leu	Arg	Gly	Arg	Pro	Trp
		35				40					45				
Arg	Asp	Trp	Glu	Glu	Arg	Arg	Gly	Val	Thr	Thr	Val	Gln	His	Pro	Glu
	50				55						60				
Lys	Ser	Asp	Trp	Gln	Thr	Arg	Thr	Gly	Gln	Pro	Cys	Ser	Cys	Met	Ile
65				70					75					80	
Gln	Glu	Leu	Ala	Ser	Glu	Arg	Glu	Ser	Val	Ala	Glu	Ala	Gly	Gly	Ser
			85					90					95		
Ala	Arg	Gln	Lys	Val	Arg	Gly	Leu	Val	Leu	Arg	Arg	Gly	Lys	Arg	Gln
		100					105					110			
Ser	Glu	Ser	Leu	His	Ala	Pro	Gly	Leu	His	Gly	Arg	Ala	Arg	Ala	Ser
		115					120					125			
Gln	Lys	Arg	Val	Asn	Asp	Pro	Glu	Cys	Asp	Trp	Glu	Gly	Glu	Leu	Ile
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<210> 3113

<211> 631

<212> DNA

<213> Homo sapiens

<400> 3113

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240  
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360  
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420  
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480

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 540  
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<210> 3114

<211> 210

<212> PRT

<213> Homo sapiens

<400> 3114

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			20					25					30		
Ile	Val	Ala	Ile	Met	Ile	Pro	Glu	Pro	Lys	Gly	Lys	Glu	Ile	Val	Ser
		35					40					45			
Leu	Leu	Glu	Arg	Asn	Ile	Thr	Val	Thr	Met	Tyr	Ile	Thr	Ile	Gly	Thr
	50					55				60					
Arg	Asn	Leu	Gln	Lys	Tyr	Val	Ser	Arg	Thr	Ser	Val	Val	Phe	Val	Ser
65					70					75					80
Ile	Ser	Phe	Ile	Val	Leu	Met	Ile	Ile	Ser	Leu	Ala	Trp	Leu	Val	Phe
			85						90					95	
Tyr	Tyr	Ile	Gln	Arg	Phe	Arg	Tyr	Ala	Asn	Ala	Arg	Asp	Arg	Asn	Gln
			100					105					110		
Arg	Arg	Leu	Gly	Asp	Ala	Ala	Lys	Lys	Ala	Ile	Ser	Lys	Leu	Gln	Ile
		115					120					125			
Arg	Thr	Ile	Lys	Lys	Gly	Asp	Lys	Glu	Thr	Glu	Ser	Asp	Phe	Asp	Asn
	130					135					140				
Cys	Ala	Val	Cys	Ile	Glu	Gly	Tyr	Lys	Pro	Asn	Asp	Val	Val	Arg	Ile
145					150					155					160
Leu	Pro	Cys	Arg	His	Leu	Phe	His	Lys	Ser	Cys	Val	Asp	Pro	Trp	Leu
			165					170						175	
Leu	Asp	His	Arg	Thr	Cys	Pro	Met	Cys	Lys	Met	Asn	Ile	Leu	Lys	Ala
		180						185				190			
Leu	Gly	Ile	Pro	Pro	Asn	Ala	Asp	Cys	Met	Asp	Asp	Phe	Ala	Thr	Asp
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Phe	Glu														
	210														

<210> 3115

<211> 1366

<212> DNA

<213> Homo sapiens

<400> 3115

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 120  
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 180

ctatactttg cacaatcaga gaatatagct gctcatgaga attgtttgct gtattcttca  
 240  
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 300  
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 360  
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 420  
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 480  
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 540  
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 600  
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 660  
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 720  
 aatattagac aaagttcatt caattccaga aaaactcatg gatgagacta cttcagaatc  
 780  
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 1020  
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 1080  
 aatccacaca tctttagaac tagtcgtctc ctcttggcct cagcagctct tccctgttct  
 1140  
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 1260  
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 1366

&lt;210&gt; 3116

&lt;211&gt; 191

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3116

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			20					25					30		
Leu	Leu	Tyr	Ser	Ser	Gly	Leu	Val	Glu	Cys	Glu	Asp	Gln	Asp	Pro	Leu
			35				40					45			
Asn	Pro	Asp	Arg	Ser	Phe	Asp	Val	Glu	Ser	Val	Lys	Lys	Glu	Ile	Gln

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Arg Gly Arg Lys Leu Lys Cys Lys Phe Cys His Lys Arg Gly Ala Thr		
65	70	75
Val Gly Cys Asp Leu Lys Asn Cys Asn Lys Asn Tyr His Phe Phe Cys		80
	85	90
Ala Lys Lys Asp Asp Ala Val Pro Gln Ser Asp Gly Val Arg Gly Ile		95
	100	105
Tyr Lys Leu Leu Cys Gln Gln His Ala Gln Phe Pro Ile Ile Ala Gln		110
	115	120
Ser Gly Lys Phe Ser Gly Val Lys Arg Lys Arg Gly Arg Lys Lys Pro		125
	130	135
Leu Ser Gly Asn His Val Gln Pro Pro Glu Thr Met Lys Cys Asn Thr		140
	145	150
Phe Ile Arg Gln Val Lys Glu Glu His Gly Arg His Thr Asp Ala Thr		155
	160	165
Val Lys Val Pro Phe Leu Lys Lys Cys Lys Xaa Ser Arg Thr Ser		170
	175	180
	185	190

&lt;210&gt; 3117

&lt;211&gt; 1373

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3117

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240
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300
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540
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600
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<210> 3118

<211> 312

<212> PRT

<213> Homo sapiens

<400> 3118

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Pro	Pro	Gly	Leu	Phe	Gln	Ala	Ser	Ala	Thr	Leu	Asp	Thr	Leu	Val	Leu
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Lys	Glu	Asn	Gln	Leu	Glu	Val	Leu	Glu	Val	Ser	Trp	Leu	His	Gly	Leu
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Lys	Ala	Leu	Gly	His	Leu	Asp	Leu	Ser	Gly	Asn	Arg	Leu	Arg	Lys	Leu
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Pro	Pro	Gly	Leu	Leu	Ala	Asn	Phe	Thr	Leu	Leu	Arg	Thr	Leu	Asp	Leu
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<210> 3119

<211> 427

<212> DNA

<213> Homo sapiens

<400> 3119

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<213> Homo sapiens

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35 40 45

Thr Glu Glu Met Ser Arg Val Leu Met Gly Gly Thr Leu Gly Arg Ser  
50 55 60

Gly Met Ser Pro Pro Cys Lys Leu Pro Cys Leu Ser Pro Pro Thr  
65 70 75 80

Tyr Thr Thr Phe Gln Ala Thr Pro Thr Leu Ile Pro Thr Glu Thr Ala  
85 90 95

Ala Leu Tyr Pro Ser Ser Ala Leu Leu Pro Ala Ala Arg Val Pro Ala  
100 105 110

Ala Pro Thr Pro Val Ala Tyr Tyr Pro Gly Pro Ala Thr Gln Leu Tyr



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 Ser Ile Val Pro Leu Leu Leu Leu Met Asn Lys Ala Ser Pro Glu  
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 <211> 344  
 <212> DNA  
 <213> Homo sapiens

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 <211> 92  
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<400> 3124  
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 Lys Gly Glu Glu Pro Asp Ile Ala Val Pro Lys Phe Lys Gln Arg Lys  
 35 40 45  
 Gly Glu Ser Asp Gly Ala Tyr Ile His Arg Met Gln Gln Glu Ala Gln  
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<210> 3126

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3126

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His Arg Leu Ser Leu Phe Val Leu Met Asp Glu Ser Glu Ser Gln Thr
      35           40           45
His Leu Phe Cys Ser Ser Ser Leu Gly Arg Glu His Arg Lys Met Gly
      50           55           60
Phe Ala Tyr Val Cys Val Trp Gly Gly Leu Phe Phe Leu Cys Phe Ser
65           70           75           80
Val Leu Ala Ile Ala Cys Gly Arg Ala Gly Thr Trp Asp Leu Ala Arg
      85           90           95
Leu Leu Ala Trp Ala Glu Ala Thr Trp Gly Val Leu Pro Ser Thr Phe
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Cys Asp Val Pro
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&lt;210&gt; 3127

&lt;211&gt; 2218

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3127

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<210> 3128

<211> 565

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3128

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 Gln Glu Gly Lys Ile Pro Asp Glu Thr Leu Glu Lys Leu Lys Ser Leu  
 35 40 45  
 Gly Leu Phe Gly Leu Gln Val Pro Glu Glu Tyr Gly Gly Leu Gly Phe  
 50 55 60  
 Ser Asn Thr Met Tyr Ser Arg Leu Gly Glu Ile Ile Ser Met Asp Gly  
 65 70 75 80  
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 85 90 95  
 Ile Ile Leu Ala Gly Thr Glu Glu Gln Lys Ala Lys Tyr Leu Pro Lys  
 100 105 110  
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 115 120 125  
 Ser Gly Ser Asp Ala Ala Ser Ile Arg Ser Arg Ala Thr Leu Ser Glu  
 130 135 140  
 Asp Lys Lys His Tyr Ile Leu Asn Gly Ser Lys Val Trp Ile Thr Asn  
 145 150 155 160  
 Gly Gly Leu Ala Asn Ile Phe Thr Val Phe Ala Lys Thr Glu Val Val  
 165 170 175  
 Asp Ser Asp Gly Ser Val Lys Asp Lys Ile Thr Ala Phe Ile Val Glu  
 180 185 190  
 Arg Asp Phe Gly Gly Val Thr Asn Gly Lys Pro Glu Asp Lys Leu Gly  
 195 200 205  
 Ile Arg Gly Ser Asn Thr Cys Glu Val His Phe Glu Asn Thr Lys Ile  
 210 215 220  
 Pro Val Glu Asn Ile Leu Gly Glu Val Gly Asp Gly Phe Lys Val Ala  
 225 230 235 240  
 Met Asn Ile Leu Asn Ser Gly Arg Phe Ser Met Gly Ser Val Val Ala  
 245 250 255  
 Gly Leu Leu Lys Arg Leu Ile Glu Met Thr Ala Glu Tyr Ala Cys Thr  
 260 265 270  
 Arg Lys Gln Phe Asn Lys Arg Leu Ser Glu Phe Gly Leu Ile Gln Glu  
 275 280 285  
 Lys Phe Ala Leu Met Ala Gln Lys Ala Tyr Val Met Glu Ser Met Thr  
 290 295 300  
 Tyr Leu Thr Ala Gly Met Leu Asp Gln Pro Gly Phe Pro Asp Cys Ser  
 305 310 315 320  
 Ile Glu Ala Ala Met Val Lys Val Phe Ser Ser Glu Ala Ala Trp Gln  
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 Cys Val Ser Glu Ala Leu Gln Ile Leu Gly Gly Leu Gly Tyr Thr Arg  
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 Asp Tyr Pro Tyr Glu Arg Ile Leu Arg Asp Thr Arg Ile Leu Leu Ile  
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 Phe Glu Gly Thr Asn Glu Ile Leu Arg Met Tyr Ile Ala Leu Thr Gly  
 370 375 380  
 Leu Gln His Ala Gly Arg Ile Leu Thr Thr Arg Ile His Glu Leu Lys  
 385 390 395 400  
 Gln Ala Lys Val Ser Thr Val Met Asp Thr Val Gly Arg Arg Leu Arg  
 405 410 415  
 Asp Ser Leu Gly Arg Thr Val Asp Leu Gly Leu Thr Gly Asn His Gly



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&lt;210&gt; 3130

&lt;211&gt; 273

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3130

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Cys	Glu	Leu	Ala	Ala	Glu	Val	Ala	Ala	Glu	Val	Glu	Lys	Ser	Ser	Asp
			20				25					30			
Gly	Pro	Gly	Ala	Ala	Gln	Glu	Pro	Thr	Trp	Leu	Thr	Asp	Val	Pro	Ala
		35				40				45					
Ala	Met	Glu	Phe	Ile	Ala	Ala	Thr	Glu	Val	Ala	Val	Ile	Gly	Phe	Phe
	50				55			60							
Gln	Asp	Leu	Glu	Ile	Pro	Ala	Val	Pro	Ile	Leu	His	Ser	Met	Val	Gln





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<210> 3132

<211> 283

<212> PRT

<213> Homo sapiens

<400> 3132

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			20					25					30		
Thr	Arg	Ser	Pro	Val	Ser	Pro	Leu	Ala	Ala	Gln	Gly	Ile	Pro	Leu	Pro
		35					40					45			
Ala	Gln	Leu	Thr	Lys	Ser	Asn	Ala	Pro	Val	His	Ile	Asp	Val	Gly	Gly
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His	Met	Tyr	Thr	Ser	Ser	Leu	Ala	Thr	Leu	Thr	Lys	Tyr	Pro	Glu	Ser
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Arg	Ile	Gly	Arg	Leu	Phe	Asp	Gly	Thr	Glu	Pro	Ile	Val	Leu	Asp	Ser
				85					90					95	
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			100					105					110		
Ile	Leu	Asn	Phe	Leu	Arg	Thr	Ser	Lys	Leu	Leu	Ile	Pro	Asp	Asp	Phe

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Cys His Leu Asn Ser Val Gln Val Leu Glu Arg Leu Gln Gln Arg Gly
225              230              235              240
Phe Glu Ile Val Gly Ser Cys Gly Gly Gly Val Asp Ser Ser Gln Phe
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&lt;210&gt; 3133

&lt;211&gt; 621

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3133

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&lt;210&gt; 3134

&lt;211&gt; 51

&lt;212&gt; PRT

<213> Homo sapiens

<400> 3134

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<210> 3135

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<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 3136

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&lt;210&gt; 3137

&lt;211&gt; 5773

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3137

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<212> PRT

<213> Homo sapiens

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				85					90					95		
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			100					105					110			
Trp	Lys	Ile	Phe	Lys	Met	Trp	Asn	Lys	Glu	Leu	Tyr	Val	Arg	Glu	Gln	
		115					120						125			
Gln	Asp	Ala	Tyr	Glu	Phe	Phe	Thr	Ser	Leu	Ile	Asp	Gln	Met	Asp	Glu	
	130					135					140					
Tyr	Leu	Lys	Lys	Met	Gly	Arg	Asp	Gln	Ile	Phe	Lys	Asn	Thr	Phe	Gln	
145					150					155					160	
Gly	Ile	Tyr	Ser	Asp	Gln	Lys	Ile	Cys	Lys	Asp	Cys	Pro	His	Arg	Tyr	
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Glu	Arg	Glu	Glu	Ala	Phe	Met	Ala	Leu	Asn	Leu	Gly	Val	Thr	Ser	Cys	
			180					185					190			
Gln	Ser	Leu	Glu	Ile	Ser	Leu	Asp	Gln	Phe	Val	Arg	Gly	Glu	Val	Leu	
		195					200					205				
Glu	Gly	Ser	Asn	Ala	Tyr	Tyr	Cys	Glu	Lys	Cys	Lys	Glu	Lys	Arg	Ile	
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Thr	Val	Lys	Arg	Thr	Cys	Ile	Lys	Ser	Leu	Pro	Ser	Val	Leu	Val	Ile	
225					230					235					240	
His	Leu	Met	Arg	Phe	Gly	Phe	Asp	Trp	Glu	Ser	Gly	Arg	Ser	Ile	Lys	
				245					250					255		
Tyr	Asp	Glu	Gln	Ile	Arg	Phe	Pro	Trp	Met	Leu	Asn	Met	Glu	Pro	Tyr	
			260					265					270			
Thr	Val	Ser	Gly	Met	Ala	Arg	Gln	Asp	Ser	Ser	Ser	Glu	Val	Gly	Glu	
		275					280					285				
Asn	Gly	Arg	Ser	Val	Asp	Gln	Gly	Gly	Gly	Gly	Ser	Pro	Arg	Lys	Lys	
	290					295					300					
Val	Ala	Leu	Thr	Glu	Asn	Tyr	Glu	Leu	Val	Gly	Val	Ile	Val	His	Ser	
305					310					315					320	
Gly	Gln	Ala	His	Ala	Gly	His	Tyr	Tyr	Ser	Phe	Ile	Lys	Asp	Arg	Arg	
				325					330					335		
Gly	Cys	Gly	Lys	Gly	Lys	Trp	Tyr	Lys	Phe	Asn	Asp	Thr	Val	Ile	Glu	
			340					345					350			
Glu	Phe	Asp	Leu	Asn	Asp	Glu	Thr	Leu	Glu	Tyr	Glu	Cys	Phe	Gly	Gly	
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Glu	Tyr	Arg	Pro	Lys	Val	Tyr	Asp	Gln	Thr	Asn	Pro	Tyr	Thr	Asp	Val	
	370					375					380					

450		455		460	
Phe Val Glu Lys Met	Pro Ala Arg Ile Tyr Gln Met	Val Arg Asp Glu			
465	470	475	480		
Asn Leu Lys Phe Met	Lys Asn Arg Asp Val Tyr Ser Ser	Asp Tyr Phe			
485	490	495			
Ser Phe Val Leu Ser	Leu Ala Ser Leu Asn Ala Thr Lys	Leu Lys His			
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Pro Tyr Tyr Pro Cys	Met Ala Lys Val Ser Leu Gln Leu Ala	Ile Gln			
515	520	525			
Phe Leu Phe Gln Thr	Tyr Leu Arg Thr Lys Lys Lys	Leu Arg Val Asp			
530	535	540			
Thr Glu Glu Trp Ile	Ala Thr Ile Glu Ala Leu Leu Ser Lys	Ser Phe			
545	550	555	560		
Asp Ala Cys Gln Trp	Leu Val Glu Tyr Phe Ile Ser Ser	Glu Gly Arg			
565	570	575			
Glu Leu Ile Lys Ile	Phe Leu Leu Glu Cys Asn Val Arg	Glu Val Arg			
580	585	590			
Val Ala Val Ala Thr	Ile Leu Glu Lys Thr Leu Asp Ser	Ala Leu Phe			
595	600	605			
Tyr Gln Asp Lys Leu	Lys Ser Leu His Gln Leu Leu Glu	Val Leu Leu			
610	615	620			
Ala Leu Leu Asp Lys	Asp Val Pro Glu Asn Cys Lys Asn	Cys Ala Gln			
625	630	635	640		
Tyr Phe Phe Leu Phe	Asn Thr Phe Val Gln Lys Gln Gly	Ile Arg Ala			
645	650	655			
Gly Asp Leu Leu Leu	Arg His Ser Ala Leu Arg His Met	Ile Ser Phe			
660	665	670			
Leu Leu Gly Ala Ser	Arg Gln Asn Asn Gln Ile Arg Arg	Trp Ser Ser			
675	680	685			
Ala Gln Ala Arg Glu	Phe Gly Asn Leu His Asn Thr Val	Ala Leu Leu			
690	695	700			
Val Leu His Ser Asp	Val Ser Ser Gln Arg Asn Val Ala	Pro Gly Ile			
705	710	715	720		
Phe Lys Gln Arg Pro	Pro Ile Ser Ile Ala Pro Ser Ser	Pro Leu Leu			
725	730	735			
Pro Leu His Glu Glu	Val Glu Ala Leu Leu Phe Met Ser	Glu Gly Lys			
740	745	750			
Pro Tyr Leu Leu Glu	Val Met Phe Ala Leu Arg Glu Leu	Thr Gly Ser			
755	760	765			
Leu Leu Ala Leu Ile	Glu Met Val Val Tyr Cys Cys Phe	Cys Asn Glu			
770	775	780			
His Phe Ser Phe Thr	Met Leu His Phe Ile Lys Asn Gln	Leu Glu Thr			
785	790	795	800		
Ala Pro Pro His Glu	Leu Lys Asn Thr Phe Gln Leu Leu	His Glu Ile			
805	810	815			
Leu Val Ile Glu Asp	Pro Ile Gln Ala Glu Arg Val Lys	Phe Val Phe			
820	825	830			
Glu Thr Glu Asn Gly	Leu Leu Ala Leu Met His His Ser	Asn His Val			
835	840	845			
Asp Ser Ser Arg Cys	Tyr Gln Cys Val Lys Phe Leu Val	Thr Leu Ala			
850	855	860			
Gln Lys Cys Pro Ala	Ala Lys Glu Tyr Phe Lys Glu Asn	Ser His His			
865	870	875	880		
Trp Ser Trp Ala Val	Gln Trp Leu Gln Lys Lys Met Ser	Glu His Tyr			

				885					890					895					
Trp	Thr	Pro	Gln	Ser	Asn	Val	Ser	Asn	Glu	Thr	Ser	Thr	Gly	Lys	Thr				
			900					905					910						
Phe	Gln	Arg	Thr	Ile	Ser	Ala	Gln	Asp	Ala	Leu	Ala	Tyr	Ala	Thr	Ala				
		915					920					925							
Leu	Leu	Asn	Glu	Lys	Glu	Gln	Ser	Gly	Ser	Ser	Asn	Gly	Ser	Glu	Ser				
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Ser	Pro	Ala	Asn	Glu	Asn	Gly	Asp	Arg	His	Leu	Gln	Gln	Gly	Ser	Glu				
945					950					955					960				
Ser	Pro	Met	Met	Ile	Gly	Glu	Leu	Arg	Ser	Asp	Leu	Asp	Asp	Val	Asp				
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Pro

&lt;210&gt; 3139

&lt;211&gt; 503

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3139

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480
tactgcaccc ctcaactcct agg
503

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&lt;210&gt; 3140

&lt;211&gt; 115

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3140

Xaa	Ile	Leu	Cys	Leu	Gly	Leu	Thr	Val	Ala	Val	Asp	Ser	Tyr	Phe	Trp				
1			5					10						15					
Arg	Gln	Leu	Thr	Trp	Pro	Glu	Gly	Lys	Val	Leu	Trp	Tyr	Asn	Thr	Val				
		20					25					30							
Leu	Asn	Lys	Ser	Ser	Asn	Trp	Gly	Thr	Ser	Pro	Leu	Leu	Trp	Tyr	Phe				
	35					40					45								
Tyr	Ser	Ala	Leu	Pro	Arg	Gly	Leu	Gly	Cys	Ser	Leu	Leu	Phe	Ile	Pro				
	50				55					60									

Leu Gly Leu Val Asp Arg Arg Thr His Ala Pro Thr Val Leu Ala Leu

65		70		75		80									
Gly	Phe	Met	Ala	Leu	Tyr	Ser	Leu	Leu	Pro	His	Lys	Glu	Leu	Arg	Phe
			85						90					95	
Ile	Ile	Tyr	Ala	Phe	Pro	Met	Leu	Asn	Ile	Thr	Ala	Ala	Arg	Gly	Cys
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Ser	Tyr	Leu													
			115												

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 <211> 1815  
 <212> DNA  
 <213> Homo sapiens

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 420  
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<210> 3142

<211> 451

<212> PRT

<213> Homo sapiens

<400> 3142

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			20					25					30		
Pro	Glu	Gly	Ile	Val	Glu	Glu	Phe	Ala	Thr	Glu	Gly	Thr	Asp	Arg	Lys
		35					40					45			
Asp	Val	Phe	Phe	Tyr	Gln	Ala	Asp	Asp	Glu	His	Tyr	Ile	Pro	Arg	Ala
	50					55				60					
Val	Leu	Leu	Asp	Leu	Glu	Pro	Arg	Val	Ile	His	Ser	Ile	Leu	Asn	Ser
65					70				75					80	
Pro	Tyr	Ala	Lys	Leu	Tyr	Asn	Pro	Glu	Asn	Ile	Tyr	Leu	Ser	Glu	His
				85					90					95	
Gly	Gly	Gly	Ala	Gly	Asn	Asn	Trp	Ala	Ser	Gly	Phe	Ser	Gln	Gly	Glu
			100					105					110		
Lys	Ile	His	Glu	Asp	Ile	Phe	Asp	Ile	Ile	Asp	Arg	Glu	Ala	Asp	Gly
		115					120					125			
Ser	Asp	Ser	Leu	Glu	Gly	Phe	Val	Leu	Cys	His	Ser	Ile	Ala	Gly	Gly
	130					135					140				
Thr	Gly	Ser	Gly	Leu	Gly	Ser	Tyr	Leu	Leu	Glu	Arg	Leu	Asn	Asp	Arg
145				150					155					160	
Tyr	Pro	Lys	Lys	Leu	Val	Gln	Thr	Tyr	Ser	Val	Phe	Pro	Asn	Gln	Asp
			165					170						175	
Glu	Met	Ser	Asp	Val	Val	Val	Gln	Pro	Tyr	Asn	Ser	Leu	Leu	Thr	Leu
			180				185					190			
Lys	Arg	Leu	Thr	Gln	Asn	Ala	Asp	Cys	Val	Val	Val	Leu	Asp	Asn	Thr

195	200	205
Ala Leu Asn Arg Ile Ala Thr Asp Arg Leu His Ile Gln Asn Pro Ser		
210	215	220
Phe Ser Gln Ile Asn Gln Leu Val Ser Thr Ile Met Ser Ala Ser Thr		
225	230	235
Thr Thr Leu Arg Tyr Pro Gly Tyr Met Asn Asn Asp Leu Ile Gly Leu		
245	250	255
Ile Ala Ser Leu Ile Pro Thr Pro Arg Leu His Phe Leu Met Thr Gly		
260	265	270
Tyr Thr Pro Leu Thr Thr Asp Gln Ser Val Ala Ser Val Arg Lys Thr		
275	280	285
Thr Val Leu Asp Val Met Arg Arg Leu Leu Gln Pro Lys Asn Val Met		
290	295	300
Val Ser Thr Gly Arg Asp Arg Gln Thr Asn His Cys Tyr Ile Ala Ile		
305	310	315
Leu Asn Ile Ile Gln Gly Glu Val Asp Pro Thr Gln Val His Lys Ser		
325	330	335
Leu Gln Arg Ile Arg Glu Arg Lys Leu Ala Asn Phe Ile Pro Trp Gly		
340	345	350
Pro Ala Ser Ile Gln Val Ala Leu Ser Arg Lys Ser Pro Tyr Leu Pro		
355	360	365
Ser Ala His Arg Val Ser Gly Leu Met Met Ala Asn His Thr Ser Ile		
370	375	380
Ser Ser Leu Phe Glu Arg Thr Cys Arg Gln Tyr Asp Lys Leu Arg Lys		
385	390	395
Arg Glu Ala Phe Leu Glu Gln Phe Arg Lys Glu Asp Met Phe Lys Asp		
405	410	415
Asn Phe Asp Glu Met Asp Thr Ser Arg Glu Ile Val Gln Gln Leu Ile		
420	425	430
Asp Glu Tyr His Ala Ala Thr Arg Pro Asp Tyr Ile Ser Trp Gly Thr		
435	440	445
Gln Glu Gln		
450		

&lt;210&gt; 3143

&lt;211&gt; 356

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3143

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120

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180

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240

cagaaacca ggtgctgctg tgtgaggctg tcgcagccac gaagatgacc atgactgcaa  
300

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356

&lt;210&gt; 3144

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 <212> PRT  
 <213> Homo sapiens

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 Ala Trp Leu Thr Val Lys His Pro His Thr Val Asp Gln Gln Pro Pro  
 35 40 45  
 Leu Pro Thr Ser Gln Glu Leu Arg Pro Ala Ala Gln Pro Lys Gln Gln  
 50 55 60  
 Pro His His Ser Gln Thr Pro Pro Gln Arg Val Cys Leu Arg Ala Pro  
 65 70 75 80  
 Ser

<210> 3145  
 <211> 436  
 <212> DNA  
 <213> Homo sapiens

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 436

<210> 3146  
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 20 25 30  
 Thr Pro Arg Ser Pro Leu His Leu Pro Ser Gly Gly Cys Leu Lys Arg  
 35 40 45  
 Arg Leu Pro Pro Phe Thr His Leu Pro Ser Val Pro Gly Pro Pro Ser



50		55		60
Leu Val Cys Gln Thr	Leu Gln Pro Pro Ala Ser	Gly His Ser Ala Arg		
65	70	75	80	
Gln Met Thr Ser Gly	Gly Glu Pro His Ile Ser	Thr Gly Ser Arg Arg		
	85	90	95	
Pro Arg Lys Leu Pro	Trp Pro Ala His Pro Arg	Cys Ser Ala Cys Pro		
	100	105	110	
Pro Asn Val Val Ser	Ser Arg Arg Arg Leu Thr	Pro Arg Arg Gly Trp		
	115	120	125	
Gly Thr Ser				
130				

&lt;210&gt; 3147

&lt;211&gt; 3106

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3147

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120  
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180  
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<210> 3148

<211> 444

<212> PRT

<213> Homo sapiens

<400> 3148

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			20					25					30		
Thr	Asp	Arg	Trp	Leu	Val	Ile	Asp	Arg	Lys	Val	Tyr	Asn	Ile	Thr	Lys
		35					40					45			
Trp	Ser	Ile	Gln	His	Pro	Gly	Gly	Gln	Arg	Val	Ile	Gly	His	Tyr	Ala
	50					55					60				
Gly	Glu	Asp	Ala	Thr	Asp	Ala	Phe	Arg	Ala	Phe	His	Pro	Asp	Leu	Glu
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Phe	Val	Gly	Lys	Phe	Leu	Lys	Pro	Leu	Leu	Ile	Gly	Glu	Leu	Ala	Pro
				85					90					95	
Glu	Glu	Pro	Ser	Gln	Asp	His	Gly	Lys	Asn	Ser	Lys	Ile	Thr	Glu	Asp
			100					105					110		
Phe	Arg	Ala	Leu	Arg	Lys	Thr	Ala	Glu	Asp	Met	Asn	Leu	Phe	Lys	Thr
		115					120					125			
Asn	His	Val	Phe	Phe	Leu	Leu	Leu	Leu	Ala	His	Ile	Ile	Ala	Leu	Glu
	130					135					140				
Ser	Ile	Ala	Trp	Phe	Thr	Val	Phe	Tyr	Phe	Gly	Asn	Gly	Trp	Ile	Pro
145				150						155				160	
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			165						170					175	
Trp	Leu	Gln	His	Asp	Tyr	Gly	His	Leu	Ser	Val	Tyr	Arg	Lys	Pro	Lys
		180					185					190			
Trp	Asn	His	Leu	Val	His	Lys	Phe	Val	Ile	Gly	His	Leu	Lys	Gly	Ala
	195					200					205				
Ser	Ala	Asn	Trp	Trp	Asn	His	Arg	His	Phe	Gln	His	His	Ala	Lys	Pro
	210				215						220				
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225				230						235				240	
Leu	Gly	Glu	Trp	Gln	Pro	Ile	Glu	Tyr	Gly	Lys	Lys	Lys	Leu	Lys	Tyr
			245						250				255		
Leu	Pro	Tyr	Asn	His	Gln	His	Glu	Tyr	Phe	Phe	Leu	Ile	Gly	Pro	Pro

			260					265					270		
Leu	Leu	Ile	Pro	Met	Tyr	Phe	Gln	Tyr	Gln	Ile	Ile	Met	Thr	Met	Ile
		275					280					285			
Val	His	Lys	Asn	Trp	Val	Asp	Leu	Ala	Trp	Ala	Val	Ser	Tyr	Tyr	Ile
	290					295					300				
Arg	Phe	Phe	Ile	Thr	Tyr	Ile	Pro	Phe	Tyr	Gly	Ile	Leu	Gly	Ala	Leu
305					310					315					320
Leu	Phe	Leu	Asn	Phe	Ile	Arg	Phe	Leu	Glu	Ser	His	Trp	Phe	Val	Trp
				325					330					335	
Val	Thr	Gln	Met	Asn	His	Ile	Val	Met	Glu	Ile	Asp	Gln	Glu	Ala	Tyr
			340					345					350		
Arg	Asp	Trp	Phe	Ser	Ser	Gln	Leu	Thr	Ala	Thr	Cys	Asn	Val	Glu	Gln
		355					360					365			
Ser	Phe	Phe	Asn	Asp	Trp	Phe	Ser	Gly	His	Leu	Asn	Phe	Gln	Ile	Glu
	370					375					380				
His	His	Leu	Phe	Pro	Thr	Met	Pro	Arg	His	Asn	Leu	His	Lys	Ile	Ala
385					390					395					400
Pro	Leu	Val	Lys	Ser	Leu	Cys	Ala	Lys	His	Gly	Ile	Glu	Tyr	Gln	Glu
				405					410					415	
Lys	Pro	Leu	Leu	Arg	Ala	Leu	Leu	Asp	Ile	Ile	Arg	Ser	Leu	Lys	Lys
			420					425					430		
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<210> 3149

<211> 1006

<212> DNA

<213> Homo sapiens

<400> 3149

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gctgcccact	ccgcgtctga	ggaggtgcgg	gagctcgagg	gcaagaccgg	cttctcatcg
180					
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240					
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300					
gttcgtgcct	tcttcgacaa	caggaacctg	cgcaagggac	ccagtggcct	ggctgatgag
360					
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420					
gacgaggaac	aggtggagct	gtcccggaag	gagaagctga	gatttctgtt	ccacatgtac
480					
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540					
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600					
ccatgatgga	ggcggccagc	gtgtgcatgg	ggcagatgga	gcctgatcag	gtgtacgagg
660					
ggatcacctt	cgaggacttc	ctgaagatct	ggcaggggat	cgacattgag	accaagatgc
720					

acgtccgctt ccttaacatg gaaacccatgg cctcttgcca ctgacccacc gccacctccg  
 780  
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<210> 3150

<211> 201

<212> PRT

<213> Homo sapiens

<400> 3150

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			20					25					30		
Ala	Pro	Ala	Ala	Gly	Thr	Met	Gly	Ala	Ala	His	Ser	Ala	Ser	Glu	Glu
			35				40					45			
Val	Arg	Glu	Leu	Glu	Gly	Lys	Thr	Gly	Phe	Ser	Ser	Asp	Gln	Ile	Glu
	50					55					60				
Gln	Leu	His	Arg	Arg	Phe	Lys	Gln	Leu	Ser	Gly	Asp	Gln	Pro	Thr	Ile
65					70					75				80	
Arg	Lys	Glu	Asn	Phe	Asn	Asn	Val	Pro	Asp	Leu	Glu	Leu	Asn	Pro	Ile
				85					90					95	
Arg	Ser	Lys	Ile	Val	Arg	Ala	Phe	Phe	Asp	Asn	Arg	Asn	Leu	Arg	Lys
			100					105					110		
Gly	Pro	Ser	Gly	Leu	Ala	Asp	Glu	Ile	Asn	Phe	Glu	Asp	Phe	Leu	Thr
		115					120					125			
Ile	Met	Ser	Tyr	Phe	Arg	Pro	Ile	Asp	Thr	Thr	Met	Asp	Glu	Glu	Gln
	130					135					140				
Val	Glu	Leu	Ser	Arg	Lys	Glu	Lys	Leu	Arg	Phe	Leu	Phe	His	Met	Tyr
145					150					155				160	
Asp	Ser	Asp	Ser	Asp	Gly	Arg	Ile	Thr	Leu	Glu	Glu	Tyr	Arg	Asn	Val
				165					170					175	
Lys	Trp	Ser	Arg	Ser	Cys	Cys	Arg	Glu	Thr	Leu	Thr	Ser	Arg	Arg	Ser
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Pro	Leu	Ala	Pro	Ser	Pro	Thr	Gly	Pro							
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<210> 3151

<211> 2079

<212> DNA

<213> Homo sapiens

<400> 3151

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240  
gccctactat atttccgttc ctatcaaaaa atggatgact cggagacagg tttcaatctg  
300  
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360  
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420  
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480  
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540  
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600  
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660  
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720  
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780  
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840  
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900  
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1020  
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1080  
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1140  
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1680  
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1740

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 1860  
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 1920  
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 1980  
 caatctatgt gatgtcttcc aacgttaata aatcacacag cctcccagga gggagacgct  
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 2079

<210> 3152

<211> 214

<212> PRT

<213> Homo sapiens

<400> 3152

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Phe	Lys	Gln	Cys	Leu	Asp	Glu	Lys	Glu	Glu	Val	Leu	Leu	Asp	Pro	Tyr
			20					25					30		
Ile	Ala	Ser	Trp	Lys	Gly	Leu	Val	Arg	Phe	Leu	Asn	Ser	Leu	Gly	Thr
			35				40					45			
Ile	Phe	Ser	Phe	Ile	Ser	Lys	Asp	Val	Val	Ser	Lys	Leu	Arg	Ile	Met
			50			55					60				
Glu	Arg	Leu	Arg	Gly	Gly	Pro	Gln	Ser	Glu	His	Tyr	Arg	Ser	Leu	Gln
65					70					75				80	
Ala	Met	Val	Ala	His	Glu	Leu	Ser	Asn	Arg	Leu	Val	Asp	Leu	Glu	Gly
				85				90					95		
Arg	Ser	His	His	Pro	Glu	Ser	Gly	Cys	Arg	Thr	Val	Leu	Arg	Leu	His
			100					105					110		
Arg	Ala	Leu	His	Trp	Leu	Gln	Leu	Phe	Leu	Glu	Gly	Leu	Arg	Thr	Ser
			115				120					125			
Pro	Glu	Asp	Ala	Arg	Thr	Ser	Ala	Leu	Cys	Ala	Asp	Ser	Tyr	Asn	Ala
			130				135				140				
Ser	Leu	Ala	Ala	Tyr	His	Pro	Trp	Val	Val	Arg	Arg	Ala	Val	Thr	Val
145					150					155				160	
Ala	Phe	Cys	Thr	Leu	Pro	Thr	Arg	Glu	Val	Phe	Leu	Glu	Ala	Met	Asn
			165					170						175	
Val	Gly	Pro	Pro	Glu	Gln	Ala	Val	Gln	Met	Leu	Gly	Glu	Ala	Leu	Pro
			180					185					190		
Phe	Ile	Gln	Arg	Val	Tyr	Asn	Val	Ser	Gln	Lys	Leu	Tyr	Ala	Glu	His
		195				200						205			
Ser	Leu	Leu	Asp	Leu	Pro										
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<210> 3153

<211> 1498

<212> DNA

<213> Homo sapiens

<400> 3153

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120  
cccactcagc aaccaacaag gaggaagcc cccgcagtgc tcggccagtgc ccgcgccatc  
180  
gccaccaggg agcgccccgc ggcgggtcca cgtggcagag gtcgcggcct cgcgggcgcg  
240  
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300  
ggccgctgtc cggcgtgggc gggaggaggg gtctccggcg cgagcgcttg acccgggcgcg  
360  
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420  
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480  
ccagggtgag cagcaccagc aggaaggcca gggccatggc agcccaggcg gcctcttcag  
540  
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600  
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660  
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720  
ggcattactc tccctaccag ggattcccgc catggactgc ttggccttca agctccctgg  
780  
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1320  
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1380  
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1498

&lt;210&gt; 3154

&lt;211&gt; 65

&lt;212&gt; PRT



<213> Homo sapiens

<400> 3154

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Cys Pro Gly Ala Gly Ile Ala Ser Arg Arg Pro Arg Gln Gln Gly Asp
          20           25           30
Ser Gly His Arg Trp Gly Ile Thr Leu Pro Thr Arg Asp Ser Arg His
          35           40           45
Gly Leu Leu Gly Leu Gln Ala Pro Trp Gly Ser Arg Gly Lys Pro Gln
 50           55           60
Gly
65

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<210> 3155

<211> 551

<212> DNA

<213> Homo sapiens

<400> 3155

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120
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cagacttgcc tagaaccatc atgttcatgt tcttctgaaa atcaggaatg ccagactgct
240
gccagccctg gggaaattct ggaaattttg aagaaagggg aggcatttgt tttagatatt
300
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360
aaaatcttac aagagctgta ccaatttaag aaacctggca ccaacctaac agaggaagat
420
ttggtagata ttgttgatac tcgaattcat caattagagg atttagaagc cactttcgct
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<210> 3156

<211> 178

<212> PRT

<213> Homo sapiens

<400> 3156

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          20           25           30
Thr Ala Ser Thr Asn Cys Asp Ser Ser Ser Glu Gly Leu Glu Lys Asp
          35           40           45
Thr Ala Thr Gln Arg Ser Asp Gln Thr Cys Leu Glu Pro Ser Cys Ser

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50		55		60
Cys Ser Ser Glu Asn Gln Glu Cys Gln Thr Ala Ala Ser Pro Gly Glu				
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Ile Leu Glu Ile Leu Lys Lys Gly Lys Ala Phe Val Leu Asp Ile Asp				
	85		90	
Leu Asp Phe Phe Ser Val Lys Asn Pro Phe Lys Lys Met Phe Thr Gln				
	100		105	
Glu Glu Tyr Lys Ile Leu Gln Glu Leu Tyr Gln Phe Lys Lys Pro Gly				
	115		120	
Thr Asn Leu Thr Glu Glu Asp Leu Val Asp Ile Val Asp Thr Arg Ile				
	130		135	
His Gln Leu Glu Asp Leu Glu Ala Thr Phe Ala Asp Leu Cys Asp Gly				
145		150		155
Asp Asp Glu Glu Thr Val Gln Gly Trp Ala Ser Asn Pro Gly Met Glu				
	165		170	
Ser Leu				

&lt;210&gt; 3157

&lt;211&gt; 903

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3157

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420
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780
cgctggcgct cccccagggg ccggagccgg ggccgcccc gactggggg cggggtggtt
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900

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cac  
903

<210> 3158  
<211> 92  
<212> PRT  
<213> Homo sapiens

<400> 3158  
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Thr Glu Pro Pro Thr Pro Glu Pro Gly Pro Lys Thr Pro Pro Arg Thr  
35 40 45  
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<212> DNA  
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2408

&lt;210&gt; 3160

&lt;211&gt; 431

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3160

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		35					40					45			
Ala	Lys	Gln	Arg	Gly	Lys	Arg	Ala	Ile	Thr	Asp	Asn	Asp	Met	Gln	Ser
	50					55					60				
Ile	Leu	Asp	Leu	His	Asn	Lys	Leu	Arg	Ser	Gln	Val	Tyr	Pro	Thr	Ala
65					70					75					80
Ser	Asn	Met	Glu	Tyr	Met	Thr	Trp	Asp	Val	Glu	Leu	Glu	Arg	Ser	Ala
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Glu	Ser	Trp	Ala	Glu	Ser	Cys	Leu	Trp	Glu	His	Gly	Pro	Ala	Ser	Leu
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		115					120						125		
Pro	Pro	Thr	Phe	His	Val	Gln	Ser	Trp	Tyr	Asp	Glu	Val	Lys	Asp	Phe
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Ser	Tyr	Pro	Tyr	Glu	His	Glu	Cys	Asn	Pro	Tyr	Cys	Pro	Phe	Arg	Cys
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Ser	Gly	Pro	Val	Cys	Thr	His	Tyr	Thr	Gln	Val	Val	Trp	Ala	Thr	Ser
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			180					185					190		
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Lys	Gly	Asn	Trp	Trp	Gly	His	Ala	Pro	Tyr	Lys	His	Gly	Arg	Pro	Cys
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Lys	Ala	Lys	Val	Ile	Gly	Ser	Val	His	Tyr	Glu	Met	Gln	Ser	Ser	Ile
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Cys	Arg	Ala	Ala	Ile	His	Tyr	Gly	Ile	Ile	Asp	Asn	Asp	Gly	Gly	Trp
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Thr	Val	Ser	Lys	Val	Thr	Val	Gln	Ala	Val	Thr	Cys	Glu	Thr	Thr	Val
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Asp	Ser	Ser	Val	His	Phe	Ile	Ser	Leu	Leu	His	Ile	Ala	Gln	Glu	Tyr
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<211> 1197
<212> DNA
<213> Homo sapiens
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1197

<210> 3162

<211> 386

<212> PRT

<213> Homo sapiens

<400> 3162

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			20					25					30		
Ile	Thr	Ala	Ser	Ser	Asn	Lys	Ser	Leu	Asn	Leu	Leu	Lys	Ile	Lys	His
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Gly	Asp	Leu	Leu	Phe	Leu	Phe	Pro	Ser	Ser	Leu	Ala	Gly	Pro	Ser	Ser
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Glu	Met	Glu	Thr	Ser	Val	Pro	Pro	Gly	Phe	Lys	Val	Phe	Gly	Ala	Pro
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Leu	Asn	His	Leu	Glu	Pro	Pro	Val	Lys	His	Met	Ser	Phe	His	Ala	Tyr
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				245					250					255	
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			260					265					270		
Val	Asp	Glu	Ile	Ala	Ala	Lys	Leu	Gly	Leu	Arg	Lys	Val	Gly	Trp	Ile
	275						280					285			
Phe	Thr	Asp	Leu	Val	Ser	Glu	Asp	Thr	Arg	Lys	Gly	Thr	Val	Arg	Tyr
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Ser	Arg	Asn	Lys	Asp	Thr	Tyr	Phe	Leu	Ser	Ser	Glu	Glu	Cys	Ile	Thr
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Asp	Gly	His	Phe	Gly	Ser	Lys	Phe	Val	Thr	Ala	Val	Ala	Thr	Gly	Gly
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Pro	Asp	Asn	Gln	Val	His	Phe	Glu	Gly	Tyr	Gln	Val	Ser	Asn	Gln	Cys

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<210> 3164  
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&lt;400&gt; 3164

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 20 25 30  
 Ser Ser Val Pro Pro Arg Gln Ala Cys Ala Ser Pro Ala Ser Cys Ser  
 35 40 45  
 Ser Ser Ala Ala Xaa Ala Ser Ala Ser Thr Gly Pro Trp His Ser Gly  
 50 55 60  
 Cys Gly Ser Ser Cys Gly Ser Cys Cys Cys Trp Gly Ser Pro Ser Ala  
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 Ser Val Gly Val Gly Ala Gly Ala Ile Arg Ser Arg Thr Val  
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&lt;210&gt; 3165

&lt;211&gt; 2413

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3165

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<210> 3166

<211> 717

<212> PRT

<213> Homo sapiens

&lt;400&gt; 3166

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Ala Glu Trp Asp Gln Val Thr Val Tyr Leu Phe Cys Asp Asp His Lys
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Leu Gln Arg Tyr Ala Leu Asn Arg Ile Thr Val Trp Arg Ser Arg Ser
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Gly Asn Glu Leu Pro Leu Ala Val Ala Ser Thr Ala Asp Leu Ile Arg
 85           90           95
Cys Lys Leu Leu Asp Val Thr Gly Gly Leu Gly Thr Asp Glu Leu Arg
 100          105          110
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<210> 3170

<211> 412

<212> PRT

<213> Homo sapiens

<400> 3170

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Asp	Leu	Cys	Glu	Asp	Glu	Pro	Thr	Leu	Asp	Val	Ile	Glu	Thr	Cys	Met
			20					25					30		
Ala	Tyr	Gln	Gly	Ile	Thr	Gln	Glu	Lys	Ile	Asn	Glu	Met	Arg	Val	Ala
			35					40					45		
Pro	Glu	Gln	Gln	Met	Ile	Ala	Asp	Ile	His	Cys	Met	Ile	Ala	Ala	Gly
			50					55				60			
Gln	Asp	Leu	Asp	Trp	Ile	Asp	Ala	Gln	Gly	Ala	Thr	Leu	Leu	His	Ile
65					70					75				80	
Ala	Gly	Ala	Asn	Gly	Tyr	Leu	Arg	Ala	Ala	Glu	Leu	Leu	Leu	Asp	His
				85						90				95	
Gly	Val	Arg	Val	Asp	Val	Lys	Asp	Trp	Asp	Gly	Trp	Glu	Pro	Leu	His
			100					105					110		
Ala	Ala	Ala	Phe	Trp	Gly	Gln	Met	Gln	Met	Ala	Glu	Leu	Leu	Val	Ser
			115					120					125		
His	Gly	Ala	Ser	Leu	Ser	Ala	Arg	Thr	Ser	Met	Asp	Glu	Met	Pro	Ile
			130					135					140		
Asp	Leu	Cys	Glu	Glu	Glu	Glu	Phe	Lys	Val	Leu	Leu	Leu	Glu	Leu	Lys
145						150				155					160
His	Lys	His	Asp	Val	Ile	Met	Lys	Ser	Gln	Leu	Arg	His	Lys	Ser	Ser
				165						170				175	
Leu	Ser	Arg	Arg	Thr	Ser	Ser	Ala	Gly	Ser	Arg	Gly	Lys	Val	Val	Arg
				180						185				190	
Arg	Ala	Ser	Leu	Ser	Asp	Arg	Thr	Asn	Leu	Tyr	Arg	Lys	Glu	Tyr	Glu
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Gly	Glu	Ala	Ile	Leu	Trp	Gln	Arg	Ser	Ala	Ala	Glu	Asp	Gln	Arg	Thr
			210					215					220		
Ser	Thr	Tyr	Asn	Gly	Asp	Ile	Arg	Glu	Thr	Arg	Thr	Asp	Gln	Glu	Asn
225						230				235					240
Lys	Asp	Pro	Asn	Pro	Arg	Leu	Glu	Lys	Pro	Val	Leu	Leu	Ser	Glu	Phe
				245						250				255	
Pro	Thr	Lys	Ile	Pro	Arg	Gly	Glu	Leu	Asp	Met	Pro	Val	Glu	Asn	Gly
			260					265						270	
Leu	Arg	Ala	Pro	Val	Ser	Ala	Tyr	Gln	Tyr	Ala	Leu	Ala	Asn	Gly	Asp

275	280	285
Val Trp Lys Val His Glu	Val Pro Asp Tyr Ser Met	Ala Tyr Gly Asn
290	295	300
Pro Gly Val Ala Asp	Ala Thr Pro Pro Trp Ser	Ser Tyr Lys Glu Gln
305	310	315
Ser Pro Gln Thr Leu	Glu Leu Lys Arg Gln	Arg Ala Ala Lys
325	330	335
Leu Leu Ser His Pro	Phe Leu Ser Thr His	Leu Gly Ser Ser Met Ala
340	345	350
Arg Thr Gly Glu Ser	Ser Ser Glu Gly Lys	Ala Xaa Leu Ile Gly Gly
355	360	365
Arg Thr Ser Pro Tyr	Ser Ser Asn Gly Thr	Ser Val Tyr Tyr Thr Val
370	375	380
Thr Ser Gly Asp Pro	Pro Pro Leu Leu Lys	Phe Lys Ala Pro Ile Glu Glu
385	390	395
Met Glu Glu Lys Val	His Gly Cys Cys Arg	Ile Ser
405	410	

&lt;210&gt; 3171

&lt;211&gt; 753

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3171

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 180  
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 753

&lt;210&gt; 3172

&lt;211&gt; 228

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3172

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Leu Phe Pro Phe Thr Gly Ser Thr Asp Cys Val Cys Tyr Ser Thr Val
           20           25           30
Gly Thr Ser Asp Ala Glu Thr Ser Ala Leu His Ile Val Val Gly Asp
           35           40           45
Ser Leu Ala Met Asp Val Ser Ser Val His His Asn Ser Thr Leu Leu
           50           55           60
Arg Tyr Ser Val Ser Leu Leu Gly Tyr Gly Phe Tyr Gly Asp Ile Ile
65           70           75           80
Lys Asp Ser Glu Lys Lys Arg Trp Leu Gly Leu Ala Arg Tyr Asp Phe
           85           90           95
Ser Gly Leu Lys Thr Phe Leu Ser His His Cys Tyr Glu Gly Thr Val
           100          105          110
Ser Phe Leu Pro Ala Gln His Thr Val Gly Ser Pro Arg Asp Arg Lys
           115          120          125
Pro Cys Arg Ala Gly Cys Phe Val Cys Arg Gln Ser Lys Gln Gln Leu
           130          135          140
Glu Glu Glu Gln Lys Lys Ala Leu Tyr Gly Leu Glu Ala Ala Glu Asp
145          150          155          160
Val Glu Glu Trp Gln Val Val Cys Gly Lys Phe Leu Ala Ile Asn Ala
           165          170          175
Thr Asn Met Ser Cys Ala Cys Arg Arg Ser Pro Arg Gly Leu Ser Pro
           180          185          190
Ala Ala His Leu Gly Asp Gly Ser Ser Asp Leu Ile Leu Ile Arg Lys
           195          200          205
Cys Ser Arg Phe Asn Phe Leu Arg Phe Leu Ile Trp His Glu Val Cys
           210          215          220
Lys Lys Pro Leu
225

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&lt;210&gt; 3173

&lt;211&gt; 573

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3173

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180
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240
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300
aagtacccgc accttccctg tctgcaagtc gggcaggaac agaaacacac ctacctgcca
360
ctagaagtct gtaatatgtt ggcagggcaa cgatgtatca agaagctaac agacaatcag
420

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 573

<210> 3174  
 <211> 152  
 <212> PRT  
 <213> Homo sapiens

<400> 3174  
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 20 25 30  
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 35 40 45  
 Val Ala Gln Tyr Phe Arg Glu Lys Tyr Thr Leu Gln Leu Lys Tyr Pro  
 50 55 60  
 His Leu Pro Cys Leu Gln Val Gly Gln Glu Gln Lys His Thr Tyr Leu  
 65 70 75 80  
 Pro Leu Glu Val Cys Asn Ile Val Ala Gly Gln Arg Cys Ile Lys Lys  
 85 90 95  
 Leu Thr Asp Asn Gln Thr Ser Thr Met Ile Lys Ala Thr Ala Arg Ser  
 100 105 110  
 Ala Pro Asp Arg Gln Glu Glu Ile Ser Arg Leu Val Arg Ser Ala Asn  
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 Glu Met Ala His Val Thr Gly Arg  
 145 150

<210> 3175  
 <211> 948  
 <212> DNA  
 <213> Homo sapiens

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 120  
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aagggccgca agtcgctgag ccattgagga tcgcgacgca gtcggcgagg ccctcatgga  
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540  
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600  
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720  
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780  
tatttcagaa tgtatctctc caagatgaga gctcattaaa agataattac aaagcttctc  
840  
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948

<210> 3176

<211> 92

<212> PRT

<213> Homo sapiens

<400> 3176

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Ala	Leu	Leu	Gly	Gly	Arg	Trp	Leu	Gln	Pro	Arg	Ala	Trp	Leu	Gly	Phe
			20					25					30		
Pro	Asp	Ala	Trp	Gly	Leu	Pro	Thr	Pro	Gln	Gln	Ala	Arg	Gly	Lys	Ala
			35				40					45			
Arg	Gly	Asn	Glu	Tyr	Gln	Pro	Ser	Asn	Ile	Lys	Arg	Lys	Asn	Lys	His
		50				55					60				
Gly	Trp	Val	Arg	Arg	Leu	Ser	Thr	Pro	Ala	Gly	Val	Gln	Val	Ile	Leu
65					70					75				80	
Arg	Arg	Met	Leu	Lys	Gly	Arg	Lys	Ser	Leu	Ser	His				
			85						90						

<210> 3177

<211> 1857

<212> DNA

<213> Homo sapiens

<400> 3177

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120  
acagtgaaca ctttggcctg cccgctcctc tccaacctgg cgaccgcact ctggctacgc  
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240  
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300

cagctggttag ccagctactg cccagaggtg gtggaggacg ggggtggcaga ccaaacagat  
360  
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420  
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480  
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1857

&lt;210&gt; 3178



&lt;211&gt; 273

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3178

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Xaa Ile Gln Asp Ile Glu Gly Ala Ser Ala Lys Asp Leu Cys Ser Ala
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Ser Ser Val Val Ser Pro Ser Phe Val Pro Thr Gly Glu Lys Pro Cys
 20           25           30
Glu Gln Val Gln Phe Gln Pro Asn Thr Val Asn Thr Leu Ala Cys Pro
 35           40           45
Leu Leu Ser Asn Leu Ala Thr Arg Leu Trp Leu Arg Asn Gly Ala Pro
 50           55           60
Val Asn Ala Ser Ala Ser Cys His Val Leu Pro Thr Gly Asp Leu Leu
 65           70           75           80
Leu Val Gly Thr Gln Gln Leu Gly Glu Phe Gln Cys Trp Ser Leu Glu
 85           90           95
Glu Gly Phe Gln Gln Leu Val Ala Ser Tyr Cys Pro Glu Val Val Glu
 100          105          110
Asp Gly Val Ala Asp Gln Thr Asp Glu Gly Gly Ser Val Pro Val Ile
 115          120          125
Ile Ser Thr Ser Arg Val Ser Ala Pro Ala Gly Gly Lys Ala Ser Trp
 130          135          140
Gly Ala Asp Arg Ser Tyr Trp Lys Glu Phe Leu Val Met Cys Thr Leu
 145          150          155          160
Phe Val Leu Ala Val Leu Leu Pro Val Leu Phe Leu Leu Tyr Arg His
 165          170          175
Arg Asn Ser Met Lys Val Phe Leu Lys Gln Gly Glu Cys Ala Ser Val
 180          185          190
His Pro Lys Thr Cys Pro Val Val Leu Pro Pro Glu Thr Arg Pro Leu
 195          200          205
Asn Gly Leu Gly Pro Pro Ser Thr Pro Leu Asp His Arg Gly Tyr Gln
 210          215          220
Ser Leu Ser Asp Ser Pro Pro Gly Ala Arg Val Phe Thr Glu Ser Glu
 225          230          235          240
Lys Arg Pro Leu Ser Ile Gln Asp Ser Phe Val Glu Val Ser Pro Val
 245          250          255
Cys Pro Arg Pro Arg Val Arg Leu Gly Ser Glu Ile Arg Asp Ser Val
 260          265          270
Val

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&lt;210&gt; 3179

&lt;211&gt; 3447

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3179

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 120
taaatcatga tacaaccacc acaggcaatt accatcaaat acattcccat gatttaciaa
 180

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3420

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3447

<210> 3180

<211> 127

<212> PRT

<213> Homo sapiens

<400> 3180

Met	Ser	Phe	Thr	Asn	Lys	Ser	Arg	Gln	Val	Ser	Gln	Pro	Glu	Ile	Ser
1				5					10					15	
Thr	Gln	Thr	Asp	Gly	Arg	Asp	Val	Asn	Ser	Cys	Leu	Lys	Leu	Arg	Cys
			20					25					30		
Ala	Phe	Thr	Pro	Thr	Gly	Lys	Val	Lys	Leu	Thr	Phe	Val	Phe	Leu	Phe
			35				40					45			
Asn	Asn	Phe	Met	Ile	Asn	Lys	Glu	Leu	Gln	Leu	Glu	Thr	Lys	Ala	Asn
	50					55					60				
Ser	Arg	Asn	Ser	Leu	Thr	Pro	Ser	Cys	Pro	Met	Val	Phe	Met	Ile	Ala
65					70					75				80	
Cys	Tyr	Gln	Asn	Glu	Ala	Leu	Cys	Ser	Thr	Leu	Tyr	Ser	Lys	Ala	Phe
			85						90					95	
Tyr	Ala	Pro	Thr	Arg	Pro	Ser	Gly	Ile	Pro	Glu	Ser	Ala	Leu	His	Thr
			100					105					110		
Gly	Arg	Lys	Thr	Ala	Ser	Ser	Tyr	Arg	Leu	Cys	Glu	Asn	Thr	Gln	
		115						120					125		

<210> 3181

<211> 287

<212> DNA

<213> Homo sapiens

<400> 3181

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120  
cctcaaggac ggctgggctt ctccctgcac tcgcagctcg ccaagttcct gttggaccgg  
180  
tacacttctt caggctgtgt cctctgtgca ggtcctgagc ttttgctcc aaaaggtctg  
240  
cagtatctgg tgctcttgtc tcatgccccca caccggagat gcaccct  
287

<210> 3182

<211> 95

<212> PRT

<213> Homo sapiens

<400> 3182

Met	Ala	Ser	Ser	Pro	Ala	Val	Asp	Val	Ser	Cys	Arg	Arg	Arg	Gly	Glu
1				5					10					15	
Arg	Arg	Gln	Leu	Asp	Ala	Arg	Arg	Asn	Lys	Cys	Arg	Ile	Arg	Leu	Gly
			20					25					30		
Gly	His	Met	Lys	Gln	Gly	Gly	Leu	Leu	Lys	Asp	Gly	Trp	Ala	Ser	Pro

	35					40				45									
Cys	Thr	Arg	Ser	Ser	Pro	Ser	Ser	Cys	Trp	Thr	Gly	Thr	Leu	Leu	Gln				
	50					55					60								
Ala	Val	Ser	Ser	Val	Gln	Val	Leu	Ser	Phe	Cys	Leu	Gln	Lys	Val	Cys				
65					70					75					80				
Ser	Ile	Trp	Cys	Ser	Cys	Leu	Met	Pro	His	Thr	Gly	Asp	Ala	Pro					
				85					90					95					

&lt;210&gt; 3183

&lt;211&gt; 1457

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3183

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ncgtacgtgt catgcattgt catgacaccc tcattgtgtg tcgcatgtcc ccaattgatc
60
acacatatcc cacgtaatgc aggggtactcc tttgtccaga ccagctcct ggttcccaaa
120
aaagttctcc ctgagagctg caggctgtcc tggaatctcc tcggggatga ggcagctgcc
180
gagctggccc aggtgctgcc gcagatgggc cggtgaaga gagtggacct ggagaagaat
240
cagatcacag ctttgggggc ctggctcctg gctgaaggac tggcccaggg gtctagcatc
300
caagtcaccc gcctctggaa taacccatt ccctgcgaca tggcccagca cctgaagagc
360
caggagccca ggctggactt tgccttcttt gacaaccagc ccagggccc ttgggggtact
420
tgatggcccc ctcaagacct ttggaatcca gccaaagtgt gcacccaaat gatccacctt
480
tcgcccactg ggataaatga ctcaggaaag aagagcctcg gcagggcgct ctgcactcca
540
cccaggagga aggatactg tgcctgctg cagtcctcag ggagaacttt tttgggaacc
600
aggagctggg tctggacaaa ggagtaccct gcattacgtg ggatatgtgt gatcaattgg
660
ggacatgcga cacacaatga ggggtgcatg acaatgcatg acacgtacgg ttatatgtgg
720
cagtgtagcc ccttgacatg tggcggtaca tgaaagtcag tgtggcacgt gttctgtggc
780
atgggtgctg gcatcccaag tggcaggata catgattgtt ggtctatata tgacacatga
840
caaatgtcca tgtcacagga ctcatggctg gccagatgac ctcaggctgg cccaagatct
900
aatattataa tttttaaagc aaatacatat ttatagattg tgtgtatgga gcagctaagt
960
caggaaaagt cttccgccc agctgggagg ggagagtgtc catgcactga ccagtccagg
1020
ggctcaaggg ccagggtctt ggaacaagcc agggactcag ccattaagtc ccctcctgcc
1080
tcaatcctca gcctacccat ctataaactt gatgactcct cccttactta catactagct
1140
tccaaggaca ggtggaggta gggccagcct ggcgggagtg gagaagccca gtctgtccta
1200

```

tgtaaggac aaagccaggt ctaatggtac tgggtagggg gcactgccaa gacaataagc  
 1260  
 taggctactg ggtccagcta ctactttggt gggattcagg tgagtctcca tgcacttcac  
 1320  
 atgttaccca gtgttcttgt tacttccaag gagaaccaag aatggctctg tcacactcga  
 1380  
 agccaggttt gatcaataaa cacaatggta ttccaaaaaa aaaaaaaaaa aaaaaaaaaa  
 1440  
 aaaaaaaaaa aaaaaaa  
 1457

<210> 3184

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3184

Xaa	Tyr	Val	Ser	Cys	Ile	Val	Met	Thr	Pro	Ser	Leu	Cys	Val	Ala	Cys
1				5					10					15	
Pro	Gln	Leu	Ile	Thr	His	Ile	Pro	Arg	Asn	Ala	Gly	Tyr	Ser	Phe	Val
			20					25					30		
Gln	Thr	Gln	Leu	Leu	Val	Pro	Lys	Lys	Val	Leu	Pro	Glu	Ser	Cys	Arg
		35					40					45			
Leu	Ser	Trp	Asn	Leu	Leu	Gly	Asp	Glu	Ala	Ala	Ala	Glu	Leu	Ala	Gln
	50					55					60				
Val	Leu	Pro	Gln	Met	Gly	Arg	Leu	Lys	Arg	Val	Asp	Leu	Glu	Lys	Asn
65					70				75					80	
Gln	Ile	Thr	Ala	Leu	Gly	Ala	Trp	Leu	Leu	Ala	Glu	Gly	Leu	Ala	Gln
			85					90					95		
Gly	Ser	Ser	Ile	Gln	Val	Ile	Arg	Leu	Trp	Asn	Asn	Pro	Ile	Pro	Cys
			100					105					110		
Asp	Met	Ala	Gln	His	Leu	Lys	Ser	Gln	Glu	Pro	Arg	Leu	Asp	Phe	Ala
	115						120					125			
Phe	Phe	Asp	Asn	Gln	Pro	Gln	Ala	Pro	Trp	Gly	Thr				
	130					135					140				

<210> 3185

<211> 1433

<212> DNA

<213> Homo sapiens

<400> 3185

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 ctctggetcc caccacacaa gcctcagagc aggaacaag cttggctgag atgcctcagg  
 120  
 cctggtaacc tgaggaggtg tagagcacc agaaggaagg gtaaaagcag ggggcaaagc  
 180  
 ggtggccctc cttttctggg ggtcacttct gggctggggc cagctgaaac ctgtgtccaa  
 240  
 gtagctttca gggctggcca caccctaagc cttgcaaaag ggctcctgc aagggtggc  
 300  
 ccatggggtc ccacattcc cagccagtga ggtagcatg gtaggagtc cacatgtgtg  
 360

caagtgcttg tgtggaggct catgtatgca tgtgtgtata tgcaaagctg cacatgacaa  
 420  
 tgtgcatgcc agtccagagt tagatgtacc tatgcagttg ccctcaagcg aagggtcata  
 480  
 tttggaacaa aggatggctc taaacatgta agcgtgcatg tgggcatgta tgtatctggg  
 540  
 gcctaaggag gtggggaagt ggggtgtggg gtaagggtg gccttcaggg catttgcaga  
 600  
 aggaggagtg ggtgggaggg aaaggctggg cagagcaggg gaaggagtga aagccaggca  
 660  
 ggaaagtgga agaacaggag aagctcatgt aatggattac cctccacagg attatgttcc  
 720  
 ttgattcctg agagtttttt ctcttgattt taccctca gtctatcact gcaagagaaa  
 780  
 gaggtagaaa agacaaacag accacaaaag acaagaacc agacatatag acagacgcac  
 840  
 ctgttgcatg tgcattgag agagcctggg agagaagaga gagcgtgcaa gagagagctc  
 900  
 agagcaggca ggcagccac cccctgcagc agtgctgggc ttcactggag cccctgcagg  
 960  
 aagtccagca gccctgtatg ccaactcctt ggtttgtcca ggtaacaggg gtgccccgcc  
 1020  
 cccttcattg tcagcaccgc gtggttgggc agctgcttca ggtgctcaaa gctggtctga  
 1080  
 cccatggggg cctggtctcc atatacaatc agagctggag tctgagagga aggatagggg  
 1140  
 ggtggggcag agtcaacagg acctgccata gcacccag cctcccccac ttcagtctct  
 1200  
 tcctgggacc accccatatt agggagagag acaagctggc ccagtgggtg ggggcacaga  
 1260  
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 1320  
 accaaaaggg tggagttggg tggtcagctc ctcccagaag acacccttg attatccagc  
 1380  
 cccagatga ggaaagccca ggatgcacc ttccttgctc ctggcagggc acc  
 1433

&lt;210&gt; 3186

&lt;211&gt; 112

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3186

Met	Pro	Leu	Leu	Trp	Phe	Val	Gln	Val	Thr	Gly	Val	Pro	Arg	Pro	Leu
1				5					10					15	
His	Asp	Gln	His	Pro	Val	Val	Gly	Gln	Leu	Leu	Gln	Val	Leu	Lys	Ala
			20					25					30		
Gly	Leu	Thr	His	Gly	Val	Leu	Val	Ser	Ile	Tyr	Asn	Gln	Ser	Trp	Ser
			35				40					45			
Leu	Arg	Gly	Arg	Ile	Gly	Gly	Trp	Gly	Arg	Val	Asn	Arg	Thr	Cys	His
			50				55				60				
Ser	Ile	Pro	Ser	Pro	Pro	His	Phe	Ser	Leu	Phe	Leu	Gly	Pro	Pro	His
65					70				75					80	
Met	Arg	Glu	Arg	Asp	Lys	Leu	Ala	Gln	Trp	Val	Gly	Ala	Gln	Ile	Gly

				85						90					95				
Val	Cys	Pro	Arg	Thr	Gln	Phe	Ser	Thr	Gly	Leu	Gly	Thr	Val	Val	Cys				
			100						105					110					

&lt;210&gt; 3187

&lt;211&gt; 860

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3187

```

gggcccggag cagcctccct ttggtccgct tctcgaaggt tcaattcaca gagcacttca
60
tatctaccag gagacggagt ttcgctatgt ttcccagact ggttttgaac tcctggccta
120
aagtggctct cccgcctcgg cctcctgagt agctgggatt acagatatgt tcctaaaaca
180
tccttgagtt caccaccttg gccagaagtt gttctgccag acccagttga ggagaccaga
240
caccatgcag aggtcgtgaa gaaggtgaat gagatgatcg tcacggggca gtatggcagg
300
ctctttgccg tgggtgcactt tgccagccgc cagtgggaagg tgacctctga agacctgatc
360
ttaattggaa atgaactaga ccttgctgtg ggagagagaa ttcgactgga gaaggtcctg
420
ctgggtgggg cagacaactt cacgctgctt ggcaagccac tcctcgggta atggctgtga
480
agtgtcgggc tttgtctggg gctccagggc tggacatgca gacagtggtc acagtgcaat
540
taggccagaa aggatcttgt tcgagtagaa gccacagtca ttgaaaagac agaatcatgg
600
ccaagaatca ttatgagatt caggaaaagg aaaaacttca agaagaaaag aagtaagtta
660
gagaaagtac cgctggggcc tgttgccacgg tgctgggtgc ccaggcgcat gcggacggag
720
ggtgtggggc acgtgggtct cgggacagga agcccaggca ggtctcaacc tggctgccac
780
tgcccacttg ccacctcat cctagaggga gcaccagag ggtccagcct cgctcccctt
840
ctcctccacg ctccacgct
860

```

&lt;210&gt; 3188

&lt;211&gt; 120

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3188

Thr	Pro	Gly	Leu	Lys	Trp	Ser	Ser	Arg	Leu	Gly	Leu	Leu	Ser	Ser	Trp				
1				5					10					15					
Asp	Tyr	Arg	Tyr	Val	Pro	Lys	Thr	Ser	Leu	Ser	Ser	Pro	Pro	Trp	Pro				
			20					25					30						
Glu	Val	Val	Leu	Pro	Asp	Pro	Val	Glu	Glu	Thr	Arg	His	His	Ala	Glu				
			35				40					45							
Val	Val	Lys	Lys	Val	Asn	Glu	Met	Ile	Val	Thr	Gly	Gln	Tyr	Gly	Arg				



```

      50              55              60
Leu Phe Ala Val Val His Phe Ala Ser Arg Gln Trp Lys Val Thr Ser
65              70              75              80
Glu Asp Leu Ile Leu Ile Gly Asn Glu Leu Asp Leu Ala Cys Gly Glu
      85              90              95
Arg Ile Arg Leu Glu Lys Val Leu Leu Val Gly Ala Asp Asn Phe Thr
      100              105              110
Leu Leu Gly Lys Pro Leu Leu Gly
      115              120

```

&lt;210&gt; 3189

&lt;211&gt; 440

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3189

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nngggccccc atggggcatgg atggggccgg actctggcct ggctgtcaac aagagggctg
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agcctgggga agcaagtccc tgttttcagt accacctgca tccccaggg cagcatcctt
120
gactccccct ctggggccagt gctgccctgc tttctctgtc tctttcaggg tgtgctgtcc
180
gacctcacca aagtgacctg gatgcatgga atcgacctg tgggtgctgg cctgatgggtg
240
ggcatgggtga tggttcacct ggggttcgcc ggctgcgtgg gggctctgcg ggagaatata
300
tgcttgetca actttgtgag tggccacaga gacaagagtg ggatatgatg caatggggta
360
caggctctgc tgggcaggat tatatgttac ctggtcagag caggtggcag ctcttaggag
420
cctccccctat ggccccctgcc
440

```

&lt;210&gt; 3190

&lt;211&gt; 111

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3190

```

Gly His Gly Trp Gly Arg Thr Leu Ala Trp Leu Ser Thr Arg Gly Leu
1              5              10              15
Ser Leu Gly Lys Gln Val Pro Val Phe Ser Thr Thr Cys Ile Pro Gln
      20              25              30
Gly Ser Ile Leu Asp Ser Pro Ser Gly Pro Val Leu Pro Cys Phe Leu
      35              40              45
Cys Leu Phe Gln Gly Val Leu Ser Asp Leu Thr Lys Val Thr Arg Met
      50              55              60
His Gly Ile Asp Pro Val Leu Val Leu Met Val Gly Met Val Met
65              70              75              80
Phe Thr Leu Gly Phe Ala Gly Cys Val Gly Ala Leu Arg Glu Asn Ile
      85              90              95
Cys Leu Leu Asn Phe Val Ser Gly His Arg Asp Lys Ser Gly Ile
      100              105              110

```

<210> 3191  
 <211> 266  
 <212> DNA  
 <213> Homo sapiens

<400> 3191  
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 60  
 acctttttgcg gcagtcgcta aattgccacg ggctgtcttt gctctctcta cttcggagcg  
 120  
 aacagcagga caatccacac ttccgtagcc tcctgggggtc ggccgccgag ccagcccggg  
 180  
 gcccgccgcc ccagcaccgc ttgcagggca gaaaagagaa gagagttgac aacatcgaga  
 240  
 tacagaaatt catctcccaa aaagcg  
 266

<210> 3192  
 <211> 84  
 <212> PRT  
 <213> Homo sapiens

<400> 3192  
 Met Asn Phe Cys Ile Ser Met Leu Ser Thr Leu Phe Ser Phe Leu Pro  
 1 5 10 15  
 Cys Asn Gly Cys Trp Gly Gly Gly Pro Arg Ala Gly Ser Ala Ala Asp  
 20 25 30  
 Pro Arg Arg Leu Arg Lys Cys Gly Leu Ser Cys Cys Ser Leu Arg Ser  
 35 40 45  
 Arg Glu Ser Lys Asp Asp Pro Trp Gln Phe Ser Asp Cys Arg Lys Arg  
 50 55 60  
 Ser Arg Ser Met Ala Gln Val Ala Asp Thr Glu Gln Gly Thr Ile Ser  
 65 70 75 80  
 Pro Ser Ala Ser

<210> 3193  
 <211> 567  
 <212> DNA  
 <213> Homo sapiens

<400> 3193  
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 60  
 acagcctgcc tgagtgttca gatccaggct ctgccagag ctggatgtaa atttatgacc  
 120  
 tggagtgagt tggtttgccc ctctgagcct cagtttctcc atctgtgaaa tggggacaac  
 180  
 agcagttcct tccaggaggg taaaaggagg agaaaaagaa tgcagatcca gccctcggca  
 240  
 gagtcagcgg ttcattgcttt gcatgcaaag tgcccagccc ctgggtcaaa gtctgtgttc  
 300  
 atccagacct gggttaacta ctgtcttctt tatgttgttc ctgtggggac gcctggggct  
 360

gctggcctcg tgattcctct ctttcctgc aggccacggg tcacctactt ccccttctcc  
 420  
 ctggggccacc gctcctgcat cgggcagcag tttgctcaga tggaggtgaa ggtgggcatg  
 480  
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 540  
 gagcaggcca cactcaagcc actggac  
 567

<210> 3194  
 <211> 116  
 <212> PRT  
 <213> Homo sapiens

<400> 3194  
 Met Gln Ile Gln Pro Ser Ala Glu Ser Ala Val His Ala Leu His Ala  
 1 5 10 15  
 Lys Cys Pro Ala Pro Gly Ser Lys Ser Val Phe Ile Gln Thr Trp Val  
 20 25 30  
 Asn Tyr Cys Leu Pro Tyr Val Val Pro Val Gly Thr Pro Gly Ala Ala  
 35 40 45  
 Gly Leu Val Ile Pro Leu Phe Pro Cys Arg Pro Arg Phe Thr Tyr Phe  
 50 55 60  
 Pro Phe Ser Leu Gly His Arg Ser Cys Ile Gly Gln Gln Phe Ala Gln  
 65 70 75 80  
 Met Glu Val Lys Val Val Met Ala Lys Leu Leu Gln Arg Leu Glu Phe  
 85 90 95  
 Arg Leu Val Pro Gly Gln Arg Phe Gly Leu Gln Glu Gln Ala Thr Leu  
 100 105 110  
 Lys Pro Leu Asp  
 115

<210> 3195  
 <211> 987  
 <212> DNA  
 <213> Homo sapiens

<400> 3195  
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 gcctcgacta cgaacgcaag accaaagtgg acttcgatga cttcctccca gctatccgga  
 120  
 agccccagac acctacctcc ttggctggat cagccaaagg tgggcaagac gggtcacagc  
 180  
 gttcaagcat ccactttgaa acggaagagg ctaaccgttc ctttctctcg gggatcaaga  
 240  
 ccattttgaa gaagagcccc gagcccaagg aggatcccc tcacctgtct gactcgtcct  
 300  
 catcctccgg ctccatcgtg tccttcaaaa gtgctgacag catcaaaagt cgaccaggaa  
 360  
 tcccacgact tgcgggtgac ggtggcgagc gaacgtcccc cgagcggaga gagccagga  
 420  
 cggggaggaa agacgacgat gttgcgagca taatgaagaa atacctccag aagtaggaac  
 480

cagttcagcc tccttgaagc tgcccttgaa gacttcccga ctctacaata acttgagac  
 540  
 agagagactg gccaggcctc cccggtggcc agagccagcc agcatggcca ccctcaagag  
 600  
 gcgagatgag cccacagagg catatcctgc ggggatgctg ggctcccagt gtggttggcc  
 660  
 tgaacaaaat aaagtgttga ctctgggca tctgtgcctt ctctatggcc ttgctacctg  
 720  
 ggattccaga gagttgatgg ggtgcagata ggggtaggac tgttagaata gaaccaaccc  
 780  
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 840  
 gaccttcctc ctctcttca cttggccagt ttcagctcac ttctccagg aagtctttcc  
 900  
 tgatatatca aactgaaaca aatgctctc ctccatgctc ccttaatccc catgcttgtc  
 960  
 gattatatcc ctttggcaat tcatttc  
 987

<210> 3196

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3196

Met	Glu	Glu	Pro	Leu	Gly	Ser	Asp	Pro	Phe	Ser	Trp	Lys	Leu	Pro	Ser
1				5					10					15	
Leu	Asp	Tyr	Glu	Arg	Lys	Thr	Lys	Val	Asp	Phe	Asp	Asp	Phe	Leu	Pro
			20					25					30		
Ala	Ile	Arg	Lys	Pro	Gln	Thr	Pro	Thr	Ser	Leu	Ala	Gly	Ser	Ala	Lys
			35				40					45			
Gly	Gly	Gln	Asp	Gly	Ser	Gln	Arg	Ser	Ser	Ile	His	Phe	Glu	Thr	Glu
	50					55					60				
Glu	Ala	Asn	Arg	Ser	Phe	Leu	Ser	Gly	Ile	Lys	Thr	Ile	Leu	Lys	Lys
65					70					75				80	
Ser	Pro	Glu	Pro	Lys	Glu	Asp	Pro	Ala	His	Leu	Ser	Asp	Ser	Ser	Ser
				85					90					95	
Ser	Ser	Gly	Ser	Ile	Val	Ser	Phe	Lys	Ser	Ala	Asp	Ser	Ile	Lys	Ser
			100					105					110		
Arg	Pro	Gly	Ile	Pro	Arg	Leu	Ala	Gly	Asp	Gly	Gly	Glu	Arg	Thr	Ser
		115				120						125			
Pro	Glu	Arg	Arg	Glu	Pro	Gly	Thr	Gly	Arg	Lys	Asp	Asp	Asp	Val	Ala
	130					135					140				
Ser	Ile	Met	Lys	Lys	Tyr	Leu	Gln	Lys							
145					150										

<210> 3197

<211> 5575

<212> DNA

<213> Homo sapiens

<400> 3197

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120  
agagcaatgg cgacactgga tcgcaaagtg cccagtcctgg aggcgtttct gggcaaacc  
180  
tggtcctcct ggatcgacgc cgccaaatta cactgctcgg acaatgtaga tttagaagag  
240  
gctggaaaag aggggtggaaa aagcagggag gttatgaggc ttaataaaga agatatgcac  
300  
ttatttggcc attaccagc acatgacgac ttctatctcg tagtgtgcag tgctgtaac  
360  
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<213> Homo sapiens

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 1560  
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 1620  
 cctgggaccc agggagggga ggggcctttg tctagggaag ggactggtag ggaagggagc  
 1680  
 agtctaggct gagggcaaga tgggaggtca gaggtgacag aagcgttcag ggggtgctgg  
 1740  
 gcctccccag gagctgtgga ctcagttcct gacctctgct ttggggttcc tggggtgggc  
 1800  
 ttggggtgag tgtagttctg gcctagcagc accctcttgt ggcttgttct agcgtgtatt  
 1860  
 aaaacttgac acacaccac acacaaaaac aaaaacacca aaaaaa  
 1906

&lt;210&gt; 3204

&lt;211&gt; 424

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3204

Met Ala Pro Glu Glu Asp Ala Gly Gly Glu Ala Leu Gly Gly Ser Phe  
 1 5 10 15  
 Trp Glu Ala Gly Asn Tyr Arg Arg Thr Val Gln Arg Val Glu Asp Gly  
 20 25 30  
 His Arg Leu Cys Gly Asp Leu Val Ser Cys Phe Gln Glu Arg Ala Arg  
 35 40 45  
 Ile Glu Lys Ala Tyr Ala Gln Gln Leu Ala Asp Trp Ala Arg Lys Trp  
 50 55 60  
 Arg Gly Thr Val Glu Lys Gly Pro Gln Tyr Gly Thr Leu Glu Lys Ala  
 65 70 75 80  
 Trp His Ala Phe Phe Thr Ala Ala Glu Arg Leu Ser Ala Leu His Leu  
 85 90 95  
 Glu Val Arg Glu Lys Leu Gln Gly Gln Asp Ser Glu Arg Val Arg Ala  
 100 105 110  
 Trp Gln Arg Gly Ala Phe His Arg Pro Val Leu Gly Gly Phe Arg Glu

[illegible]

<210> 3205

<211> 1482

<212> DNA

<213> Homo sapiens

<400> 3205

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60

ggctctggcca agacacccct atctgctctg ggctgaaac ctcacaaccc agcggacatc  
120

ctgttgcacc ccacaggaga gccccggagc tatgtggagt ctgtggcacg gacagcggtg  
180

gctggacccc gagctcagga ctctgagccc aagagcttta gtgctccagc caccaggcc  
240

tatggccatg agatacccct gaggaacggg accctgggtg gctcctttgt ctccccagc  
 300  
 cccctctcca ccagcagccc catcctcagt gctgacagca cttcagtggg gagtttcccg  
 360  
 tcgggagaga gcagtgacca gggccccgg acgcccaccc agcctctggt ggagtctggc  
 420  
 ttccgctcag gcagcctggg acagcccagc ccgtctgccc agagaaaacta ccagagctct  
 480  
 tctcctctcc cgactgtggg cagtagctac agcagccccg actactcaact tcagcatttc  
 540  
 agctcctctc cggaaagcca ggctcgagct cagttcagtg tggttggcgt ccacacgggtg  
 600  
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 1140  
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 1320  
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 1380  
 cccgacttct ccaagtactc catgccagac aacagcccgg agacgcgggc taaagtgaag  
 1440  
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 1482

<210> 3206

<211> 494

<212> PRT

<213> Homo sapiens

<400> 3206

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1				5				10					15		
Arg	Ser	Pro	Pro	Gly	Leu	Ala	Lys	Thr	Pro	Leu	Ser	Ala	Leu	Gly	Leu
			20					25					30		
Lys	Pro	His	Asn	Pro	Ala	Asp	Ile	Leu	Leu	His	Pro	Thr	Gly	Glu	Pro

2418



465 470 475 480  
Phe Val Gln Asp Thr Ser Lys Tyr Trp Tyr Lys Pro Lys Ile  
485 490

<210> 3207  
<211> 495  
<212> DNA  
<213> Homo sapiens

<400> 3207  
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60  
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120  
ctgtcgcgca agctgcataa gatcctggag acgcggctgg acaacgacaa ggagatgtta  
180  
gaagctctca aggcactttc aacctttttt gttgaaaata gtctgcggac tcgaagaaat  
240  
ttacgtggag atattgaacg taaaagttaa gccatcaatg aagaatttgt aagcattttc  
300  
aagggaagtga aggaggaact tgaaagcata agcgaagatg ttcaagcaat gagcaactgt  
360  
tgtcaagata tgacaagtcg cctacaggca gcaaaggaac agactcaaga tttaatagta  
420  
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480  
gccttcttat ccaag  
495

<210> 3208  
<211> 107  
<212> PRT  
<213> Homo sapiens

<400> 3208  
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1 5 10 15  
Leu Arg Thr Arg Arg Asn Leu Arg Gly Asp Ile Glu Arg Lys Ser Leu  
20 25 30  
Ala Ile Asn Glu Glu Phe Val Ser Ile Phe Lys Glu Val Lys Glu Glu  
35 40 45  
Leu Glu Ser Ile Ser Glu Asp Val Gln Ala Met Ser Asn Cys Cys Gln  
50 55 60  
Asp Met Thr Ser Arg Leu Gln Ala Ala Lys Glu Gln Thr Gln Asp Leu  
65 70 75 80  
Ile Val Asn Thr Thr Lys Leu Gln Ser Glu Ser Gln Lys Leu Glu Ile  
85 90 95  
Arg Ala Gln Val Ala Asp Ala Phe Leu Ser Lys  
100 105

<210> 3209  
<211> 346  
<212> DNA  
<213> Homo sapiens

&lt;400&gt; 3209

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 tgcgtccagc cttgtccctt ctgacctggg ccctacccac ggggaaatgt tcccatagca  
 120  
 gaagaatcag cccacagtg caggggtgtg ttagtgggga acgggctctg ggctcctgtg  
 180  
 ggaaccaggg accccctatc ttggtaccgg tcattggatg tatccccagc tcatgcctgt  
 240  
 gtctgtcttg gcccggtgtg tcaccctgtg ttcattctctc tcccagccat ggcctctcaa  
 300  
 actgggggtt tegtctccct atgagggggg cctggtatgt acgcgt  
 346

&lt;210&gt; 3210

&lt;211&gt; 95

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3210

Met	Arg	Pro	Ala	Leu	Ser	Leu	Leu	Thr	Trp	Ala	Leu	Pro	Thr	Gly	Lys
1				5					10					15	
Cys	Ser	His	Ser	Arg	Arg	Ile	Ser	Pro	Thr	Val	Gln	Gly	Cys	Val	Ser
			20					25					30		
Gly	Glu	Arg	Ala	Leu	Gly	Ser	Cys	Gly	Asn	Gln	Gly	Pro	Pro	Ile	Leu
			35				40					45			
Val	Pro	Val	Ile	Gly	Cys	Ile	Pro	Ser	Ser	Cys	Leu	Cys	Leu	Ser	Trp
			50				55				60				
Pro	Val	Trp	Ser	Pro	Cys	Val	His	Leu	Ser	Pro	Ser	His	Gly	Leu	Ser
65					70					75				80	
Asn	Trp	Gly	Phe	Arg	Leu	Pro	Met	Arg	Gly	Ser	Trp	Tyr	Val	Arg	
			85						90					95	

&lt;210&gt; 3211

&lt;211&gt; 1728

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3211

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 60  
 tggacaaaag attccaagtc gatagcccag gccaaagaaa gcgcagggga caactccagt  
 120  
 gtttccttgg ccatcgtgca agccagtccg aaggaccagg gactctatta ctgctgcatc  
 180  
 aagaacagct acggaaaagt gactgctgaa tttaacctca cagctgaagt tctcaaacag  
 240  
 ctgtcaagtc acacagaata ctaaaggatg tgaagagatt gaattcagcc aactcatctt  
 300  
 caaagaagac ttctccatg acagctactt tggggggcgc ctgcgtgggc agatcgccac  
 360  
 ggaggagctg cactttggag aaggggttca ccgcaaagcc ttccgcagca cagtgatgca  
 420

cggcctcatg cctgtcttca aacctggcca tgcctgtgtg cttaagggtgc acaatgccat  
 480  
 tgcctatggg accagaaata atgatgagct catccaaagg aactacaaac tcgctgccca  
 540  
 ggaatgctat gttcaaaaata ctgccaggta ttatgccaaag atctacgctg ctgaagcaca  
 600  
 gcctctggaa ggctttggag aagtacctga gatcattcct atttttctta tccatcgccc  
 660  
 tgagaacaat atcccgtatg ctacagtggg ggaggagctg attggagaat ttgtgaagta  
 720  
 ttccatcagg gatgggaaag aaataaactt cttgagaaga gaatcagaag ctggtcagaa  
 780  
 atgttgacc ttccagcact ggggtgtacca gaaaacaagt ggctgcctcc tggtgacgga  
 840  
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 900  
 caagggattt aaaggcaact gttccatgac cttcattgat cagtttaaag cactacacca  
 960  
 gtgtaacaag tattgcaaaa tgctgggact gaaatccctt caaaacaaca accagaaaca  
 1020  
 gaagcagccg agcattggga aaagcaaagt tcaaacaac tctatgacag taaagaaggc  
 1080  
 agggcctgag accccaggcg aaaagaaaac ctaacgtccc cggttaacct aatggccact  
 1140  
 ggctagcagc acacaatctc gccagggaaa atctgaggcc acacaggaga gaatatacag  
 1200  
 cctgcagaga gtgcgtggca atccttactc ccagccgact gtgcgccaag atgcttctaa  
 1260  
 acccatcacc tgctgtcttc actcaaatga tttcagaaca ggatttgca ccaggtttat  
 1320  
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 1620  
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 1680  
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 1728

<210> 3212

<211> 87

<212> PRT

<213> Homo sapiens

<400> 3212

Ser	Gly	Asn	Ile	Lys	Leu	Ser	Tyr	Gln	Phe	Ser	Glu	Ile	His	Glu	Asp
1				5				10					15		
Ser	Thr	Val	Cys	Trp	Thr	Lys	Asp	Ser	Lys	Ser	Ile	Ala	Gln	Ala	Lys

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          20          25          30
Lys Ser Ala Gly Asp Asn Ser Ser Val Ser Leu Ala Ile Val Gln Ala
          35          40          45
Ser Pro Lys Asp Gln Gly Leu Tyr Tyr Cys Cys Ile Lys Asn Ser Tyr
          50          55          60
Gly Lys Val Thr Ala Glu Phe Asn Leu Thr Ala Glu Val Leu Lys Gln
65          70          75          80
Leu Ser Ser His Thr Glu Tyr
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<210> 3213  
 <211> 348  
 <212> DNA  
 <213> Homo sapiens

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<400> 3213
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120
gataaacatg cccaactcat cttggcccaa atcaataaga tgagaaatgg acagcatttc
180
tgtgatgtgc agctgcaagt tggacaggaa agtttttaaag ctcatcggtt ggttttggct
240
gccagcagtc cttactttgc agctttgttc actggaggaa tgaaagagtc ctcaaaagat
300
gttgtagcga ttctaggaat tgaagcagga atctttcaga tacttcta
348

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<210> 3214  
 <211> 92  
 <212> PRT  
 <213> Homo sapiens

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<400> 3214
Met Ala Asn Glu Asp Cys Pro Lys Ala Ala Asp Ser Pro Phe Ser Ser
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Asp Lys His Ala Gln Leu Ile Leu Ala Gln Ile Asn Lys Met Arg Asn
          20          25          30
Gly Gln His Phe Cys Asp Val Gln Leu Gln Val Gly Gln Glu Ser Phe
          35          40          45
Lys Ala His Arg Leu Val Leu Ala Ala Ser Ser Pro Tyr Phe Ala Ala
          50          55          60
Leu Phe Thr Gly Gly Met Lys Glu Ser Ser Lys Asp Val Val Pro Ile
65          70          75          80
Leu Gly Ile Glu Ala Gly Ile Phe Gln Ile Leu Leu
          85          90

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<210> 3215  
 <211> 597  
 <212> DNA  
 <213> Homo sapiens

<400> 3215

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 120  
 accttcaagt tcgacttgga cggggacgca cccgatgaaa ttgccacgta tatggtggag  
 180  
 catgacttta tcctgcaggc cgagcgggaa acgttcatcg agcagatgaa ggatgtcatg  
 240  
 gacaaggcag aggacatgct cagcgaggac acagacgccg accgtggctc cgacccaggg  
 300  
 accagcccg c cacacctcag cacctgcggc ctgggcaccg gggaggagag cgcacaatcc  
 360  
 caagccaacg cccccgtgta tcagcagaac gtcctgcaca ccgggaagag gtggttcac  
 420  
 atctgtccgg tgctgagcc ccccgcccc gagggccctt gaatcttcgc cccacttcc  
 480  
 tctaagctcc ctgcgcagc aagccagcca agattcagcg ccctataaag accagctgtc  
 540  
 ctcgaaggaa caaccagct ttctagccag tcagcagctc ctgggccagg cgggccc  
 597

<210> 3216

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3216

Thr	Arg	Ala	Arg	Ser	Arg	Gln	Glu	Arg	Ala	Ser	Arg	Pro	Arg	Leu	Thr
1				5					10					15	
Ile	Leu	Asn	Val	Cys	Asn	Thr	Gly	Asp	Lys	Met	Val	Glu	Cys	Gln	Leu
			20					25					30		
Glu	Thr	His	Asn	His	Lys	Met	Val	Thr	Phe	Lys	Phe	Asp	Leu	Asp	Gly
		35					40					45			
Asp	Ala	Pro	Asp	Glu	Ile	Ala	Thr	Tyr	Met	Val	Glu	His	Asp	Phe	Ile
	50					55					60				
Leu	Gln	Ala	Glu	Arg	Glu	Thr	Phe	Ile	Glu	Gln	Met	Lys	Asp	Val	Met
65					70				75					80	
Asp	Lys	Ala	Glu	Asp	Met	Leu	Ser	Glu	Asp	Thr	Asp	Ala	Asp	Arg	Gly
			85					90					95		
Ser	Asp	Pro	Gly	Thr	Ser	Pro	Pro	His	Leu	Ser	Thr	Cys	Gly	Leu	Gly
		100						105					110		
Thr	Gly	Glu	Glu	Ser	Arg	Gln	Ser	Gln	Ala	Asn	Ala	Pro	Val	Tyr	Gln
		115				120						125			
Gln	Asn	Val	Leu	His	Thr	Gly	Lys	Arg	Trp	Phe	Ile	Ile	Cys	Pro	Val
	130					135					140				
Pro	Glu	Pro	Pro	Ala	Pro	Glu	Gly	Pro							
145					150										

<210> 3217

<211> 2570

<212> DNA

<213> Homo sapiens

<400> 3217

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120  
accatacca ggcactatga gctttacagg cgctgcaaac tggaggaaat gggctttaca  
180  
gatgtgggcc cagaaaacaa gccagtcagt gttcaagaga cctatgaagc caaaagacat  
240  
gagttccatg gtgaacgtca gaggaaggaa gaagaaatga aacagatgtt tgtgcagcga  
300  
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360  
caccttaaga gacttcacca agaagagaga atgaagcttg aagaacaaag aagacttttg  
420  
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480  
tcctttctgg caacaggcag caacctgagt aaggacaagg accataagaa ctccaatttt  
540  
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600  
aaaactagaa gtgtgctttg attttgctgt tatttgtttt atcacttcta tatttggtga  
660  
acagccacag ttactgatat ttatggaaaa gtactttcaa gtacaaggtc aatacataag  
720  
ccagagtga tgatactaca agttgagcat ctctaattca aaaatctgaa atccagaagc  
780  
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840  
gacaccttg ctttctgatg gttcagttta aacagatttt gtttcttgca caaaattttt  
900  
gtataaatta ctttcaggct atatgtataa ggtggatgtg aaacatgaat tatgtaatta  
960  
gagtcgggtc ccgttggtga tatgcagata ttccaaacct gaaatccaaa acacttctgg  
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tccttagcat tttggataag ggatactcag cttgtaccta tatattcata tatattcact  
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1140  
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1200  
gaaccatta atatcgtggc tatctgatta catttatatt ccaagatgaa ctttttttta  
1260  
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1560  
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1620

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 1680  
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 1800  
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 1860  
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 1920  
 tgtaaagga aaaaaaagag gggggaagat caggtcatac tatctactct cctcatctct  
 1980  
 aacagctcag gatctcttag cattttaatt agatgtaatt gtttgtcttt aactgtcaaa  
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 2220  
 cactgaattc ctttttttca aggtaatttc ttgtgcctct aatagcccaa gaatgggagg  
 2280  
 ttgatcagat ctgacatgat tccttctctgt tctgaactgt ggggtgtgca catctctgct  
 2340  
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 2400  
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 2460  
 aactggggat tgggtgggca ggaaaagggtg atatccattc tttctgataa ctagatgggtg  
 2520  
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 2570

&lt;210&gt; 3218

&lt;211&gt; 181

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3218

Gly	Val	Lys	Ala	Arg	Gln	Tyr	Pro	Trp	Gly	Val	Val	Gln	Val	Glu	Asn
1				5					10					15	
Glu	Asn	His	Cys	Asp	Phe	Val	Lys	Leu	Arg	Glu	Met	Leu	Ile	Cys	Thr
			20					25					30		
Asn	Met	Glu	Asp	Leu	Arg	Glu	Gln	Thr	His	Thr	Arg	His	Tyr	Glu	Leu
		35					40					45			
Tyr	Arg	Arg	Cys	Lys	Leu	Glu	Glu	Met	Gly	Phe	Thr	Asp	Val	Gly	Pro
	50					55					60				
Glu	Asn	Lys	Pro	Val	Ser	Val	Gln	Glu	Thr	Tyr	Glu	Ala	Lys	Arg	His
65					70				75					80	
Glu	Phe	His	Gly	Glu	Arg	Gln	Arg	Lys	Glu	Glu	Glu	Met	Lys	Gln	Met
			85					90						95	
Phe	Val	Gln	Arg	Val	Lys	Glu	Lys	Glu	Ala	Ile	Leu	Lys	Glu	Ala	Glu
		100					105					110			
Arg	Glu	Leu	Gln	Ala	Lys	Phe	Glu	His	Leu	Lys	Arg	Leu	His	Gln	Glu

	115		120		125	
Glu	Arg	Met	Lys	Leu	Glu	Glu
	130		135		140	
Ile	Ala	Phe	Ser	Lys	Lys	Lys
145			150		155	160
Ser	Phe	Leu	Ala	Thr	Gly	Ser
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Asn	Ser	Asn	Phe	Leu		
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&lt;210&gt; 3219

&lt;211&gt; 1241

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3219

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<210> 3220

<211> 413

<212> PRT

<213> Homo sapiens

<400> 3220

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			20					25					30		
Val	Asn	Gly	Gly	Xaa	Val	Thr	Ser	Glu	Arg	Glu	Thr	Asp	Ile	Leu	Asp
		35					40					45			
Asp	Glu	Leu	Pro	Asn	Gln	Asp	Gly	His	Ser	Ala	Gly	Ser	Met	Gly	Thr
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Leu	Ser	Ser	Leu	Asp	Gly	Val	Thr	Asn	Ile	Ser	Glu	Gly	Gly	Tyr	Pro
65				70						75				80	
Glu	Ala	Leu	Ser	Pro	Leu	Thr	Asn	Gly	Leu	Asp	Lys	Ser	Tyr	Pro	Met
				85				90						95	
Glu	Pro	Met	Val	Asn	Gly	Gly	Gly	Tyr	Pro	Tyr	Glu	Ser	Ala	Ser	Arg
			100					105					110		
Ala	Gly	Pro	Ala	His	Ala	Gly	His	Thr	Ala	Pro	Met	Arg	Pro	Ser	Tyr
			115					120				125			
Ser	Ala	Gln	Glu	Gly	Leu	Ala	Gly	Tyr	Gln	Arg	Glu	Gly	Pro	His	Pro
	130					135					140				
Ala	Trp	Pro	Gln	Pro	Val	Thr	Thr	Ser	His	Tyr	Ala	His	Asp	Pro	Ser
145					150					155				160	
Gly	Met	Phe	Arg	Ser	Gln	Ser	Phe	Ser	Glu	Ala	Glu	Pro	Gln	Leu	Pro
				165					170					175	
Pro	Ala	Pro	Val	Arg	Gly	Gly	Ser	Ser	Arg	Glu	Ala	Val	Gln	Arg	Gly
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Leu	Asn	Ser	Trp	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Pro	Arg	Pro
	195					200						205			
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225				230						235				240	
Glu	Phe	Pro	Arg	Ala	Ala	Ser	Gln	Gln	Glu	Ile	Glu	Gln	Ser	Ile	Glu
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Thr	Leu	Asn	Met	Leu	Met	Leu	Asp	Leu	Glu	Pro	Ala	Ser	Ala	Ala	Ala
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Pro	Leu	His	Lys	Ser	Gln	Ser	Val	Pro	Gly	Ala	Trp	Pro	Gly	Ala	Ser
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Pro	Leu	Ser	Ser	Gln	Pro	Leu	Ser	Gly	Ser	Ser	Arg	Gln	Ser	His	Pro
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Leu	Thr	Gln	Ser	Arg	Ser	Gly	Tyr	Ile	Pro	Ser	Gly	His	Ser	Leu	Gly
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Thr	Pro	Glu	Pro	Ala	Pro	Arg	Ala	Ser	Leu	Glu	Ser	Val	Pro	Pro	Gly
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Arg	Ser	Tyr	Ser	Pro	Tyr	Asp	Tyr	Gln	Pro	Cys	Leu	Ala	Gly	Pro	Asn

				340					345					350			
Gln	Asp	Phe	His	Ser	Lys	Ser	Pro	Ala	Ser	Ser	Ser	Leu	Pro	Ala	Phe		
		355					360					365					
Leu	Pro	Thr	Thr	His	Ser	Pro	Pro	Gly	Pro	Gln	Gln	Pro	Pro	Ala	Ser		
		370				375					380						
Leu	Pro	Gly	Leu	Thr	Ala	Gln	Pro	Leu	Leu	Ser	Pro	Lys	Glu	Ala	Thr		
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<211> 1585
<212> DNA
<213> Homo sapiens
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<210> 3222

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3222

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			20					25					30		
Gln	Ala	Thr	Gly	Gly	Val	Glu	Pro	Ala	Gly	Trp	Lys	Glu	Met	Arg	Cys
			35					40				45			
His	Leu	Arg	Ala	Asn	Gly	Tyr	Leu	Cys	Lys	Tyr	Gln	Phe	Glu	Val	Leu
			50				55				60				
Cys	Pro	Ala	Pro	Arg	Pro	Gly	Ala	Ala	Ser	Asn	Leu	Ser	Tyr	Arg	Ala
65					70				75					80	
Pro	Phe	Gln	Leu	His	Ser	Ala	Ala	Leu	Asp	Phe	Ser	Pro	Pro	Gly	Thr
				85				90						95	
Glu	Val	Ser	Ala	Leu	Cys	Arg	Gly	Gln	Leu	Pro	Ile	Ser	Val	Thr	Cys
			100					105					110		
Ile	Ala	Asp	Glu	Ile	Gly	Ala	Arg	Trp	Asp	Lys	Leu	Ser	Gly	Asp	Val
			115				120						125		
Leu	Cys	Pro	Cys	Pro	Gly	Arg	Tyr	Leu	Arg	Ala	Gly	Lys	Cys	Ala	Glu
			130				135				140				
Leu	Pro	Asn	Cys	Leu	Asp	Asp	Leu	Gly	Gly	Phe	Ala	Cys	Glu	Cys	Ala
145					150					155					160
Thr	Gly	Phe	Glu	Leu	Gly	Lys	Asp	Gly	Arg	Ser	Cys	Val	Thr	Ser	Gly
			165					170						175	
Glu	Gly	Gln	Pro	Thr	Leu	Gly	Gly	Thr	Gly	Val	Pro	Thr	Arg	Arg	Pro
			180					185					190		
Pro	Ala	Thr	Ala	Thr	Ser	Pro	Val	Pro	Gln	Arg	Thr	Trp	Pro	Ile	Arg
			195				200					205			
Val	Asp	Glu	Lys	Leu	Gly	Glu	Thr	Pro	Leu	Val	Pro	Glu	Gln	Asp	Asn
			210				215				220				
Ser	Val	Thr	Ser	Ile	Pro	Glu	Ile	Pro	Arg	Trp	Gly	Ser	Gln	Ser	Thr
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Met	Ser	Thr	Leu	Gln	Met	Ser	Leu	Gln	Ala	Glu	Ser	Lys	Ala	Thr	Ile



<211> 224  
 <212> PRT  
 <213> Homo sapiens

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 Val Ile Gly Val Ile Leu Gly Ala Glu Ala Ser Arg Arg Tyr Lys Lys  
 35 40 45  
 Val Ile Pro Gly Ala Glu Pro Leu Ile Cys Ala Ser Ser Leu Leu Ala  
 50 55 60  
 Thr Ala Pro Cys Leu Tyr Leu Ala Leu Val Leu Ala Pro Thr Thr Leu  
 65 70 75 80  
 Leu Ala Ser Tyr Val Phe Leu Gly Leu Gly Glu Leu Leu Leu Ser Cys  
 85 90 95  
 Asn Trp Ala Val Val Ala Asp Ile Leu Leu Ser Val Val Val Pro Arg  
 100 105 110  
 Cys Arg Gly Thr Ala Glu Ala Leu Gln Ile Thr Val Gly His Ile Leu  
 115 120 125  
 Gly Asp Ala Gly Ser Pro Tyr Leu Thr Gly Leu Ile Ser Ser Val Leu  
 130 135 140  
 Arg Pro Gly Ala Leu Thr Pro Leu Gln Arg Phe Arg Ser Leu Gln Gln  
 145 150 155 160  
 Ser Phe Leu Cys Cys Ala Phe Val Ile Ala Leu Gly Gly Gly Cys Phe  
 165 170 175  
 Leu Leu Thr Ala Leu Tyr Leu Glu Arg Asp Glu Thr Arg Ala Trp Gln  
 180 185 190  
 Pro Val Thr Gly Thr Pro Asp Ser Asn Asp Val Asp Ser Asn Asp Leu  
 195 200 205  
 Glu Arg Gln Gly Leu Leu Ser Gly Ala Gly Ala Ser Thr Glu Glu Pro  
 210 215 220

<210> 3225  
 <211> 506  
 <212> DNA  
 <213> Homo sapiens

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 aagtgaacc acagcctcaa cccacacaga ggatggaacc accttctgca gctaaaaata  
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 420

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<210> 3226  
 <211> 137  
 <212> PRT  
 <213> Homo sapiens

<400> 3226  
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 Leu Arg Pro Cys Thr Phe Phe Ile Gln Glu Ala Thr Lys Asn Ser Ala  
 20 25 30  
 Cys Phe Pro Val Pro Lys Met Pro Val Pro Cys Ala Leu Gly Glu Glu  
 35 40 45  
 Leu Val Pro Cys His Arg Gly Thr Gly Pro Ala Val Val Trp Pro Ala  
 50 55 60  
 Gln Pro Gln Gln Gly Glu Val Glu Pro Gln Pro Gln Pro Thr Gln Arg  
 65 70 75 80  
 Met Glu Pro Pro Ser Ala Ala Lys Asn Asn His Thr Ala Phe Glu Val  
 85 90 95  
 Ser His Pro Arg Cys Arg Trp Gly Cys Met Lys Leu His Glu His Gly  
 100 105 110  
 Met Ser Phe Ile Phe Arg Val Pro Arg Gly His Glu Trp Tyr Gln Asp  
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<210> 3227  
 <211> 1623  
 <212> DNA  
 <213> Homo sapiens

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 aaa  
 1623

&lt;210&gt; 3228

&lt;211&gt; 385

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3228

Met	Lys	Leu	Val	Arg	Lys	Asn	Ile	Glu	Lys	Asp	Asn	Ala	Gly	Gln	Val
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Thr	Leu	Val	Pro	Glu	Glu	Pro	Glu	Asp	Met	Trp	His	Thr	Tyr	Asn	Leu
			20					25					30		
Val	Gln	Val	Gly	Asp	Ser	Leu	Arg	Ala	Ser	Thr	Ile	Arg	Lys	Val	Gln
			35				40					45			
Thr	Glu	Ser	Ser	Thr	Gly	Ser	Val	Gly	Ser	Asn	Arg	Val	Arg	Thr	Thr
	50					55				60					
Leu	Thr	Leu	Cys	Val	Glu	Ala	Ile	Asp	Phe	Asp	Ser	Gln	Ala	Cys	Gln

65                                      70                                      75                                      80  
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    85                                      90                                      95  
 Gly Ala Tyr His Thr Ile Glu Leu Glu Pro Asn Arg Gln Phe Thr Leu  
    100                                      105                                      110  
 Ala Lys Lys Gln Trp Asp Ser Val Val Leu Glu Arg Ile Glu Gln Ala  
    115                                      120                                      125  
 Cys Asp Pro Ala Trp Ser Ala Asp Val Ala Ala Val Val Met Gln Glu  
    130                                      135                                      140  
 Gly Leu Ala His Ile Cys Leu Val Thr Pro Ser Met Thr Leu Thr Arg  
    145                                      150                                      155                                      160  
 Ala Lys Val Glu Val Asn Ile Pro Arg Lys Arg Lys Gly Asn Cys Ser  
    165                                      170                                      175  
 Gln His Asp Arg Ala Leu Glu Arg Phe Tyr Glu Gln Val Val Gln Ala  
    180                                      185                                      190  
 Ile Gln Arg His Ile His Phe Asp Val Val Lys Cys Ile Leu Val Ala  
    195                                      200                                      205  
 Ser Pro Gly Phe Val Arg Glu Gln Phe Cys Asp Tyr Met Phe Gln Gln  
    210                                      215                                      220  
 Ala Val Lys Thr Asp Asn Lys Leu Leu Leu Glu Asn Arg Ser Lys Phe  
    225                                      230                                      235                                      240  
 Leu Gln Val His Ala Ser Ser Gly His Lys Tyr Ser Leu Lys Glu Ala  
    245                                      250                                      255  
 Leu Cys Asp Pro Thr Val Ala Ser Arg Leu Ser Asp Thr Lys Ala Ala  
    260                                      265                                      270  
 Gly Glu Val Lys Ala Leu Asp Asp Phe Tyr Lys Met Leu Gln His Glu  
    275                                      280                                      285  
 Pro Asp Arg Ala Phe Tyr Gly Leu Lys Gln Val Glu Lys Ala Asn Glu  
    290                                      295                                      300  
 Ala Met Ala Ile Asp Thr Leu Leu Ile Ser Asp Glu Leu Phe Arg His  
    305                                      310                                      315                                      320  
 Gln Asp Val Ala Thr Arg Ser Arg Tyr Val Arg Leu Val Asp Ser Val  
    325                                      330                                      335  
 Lys Glu Asn Ala Gly Thr Val Arg Ile Phe Ser Ser Leu His Val Ser  
    340                                      345                                      350  
 Gly Glu Gln Leu Ser Gln Leu Thr Gly Val Ala Ala Ile Leu Arg Phe  
    355                                      360                                      365  
 Pro Val Pro Glu Leu Ser Asp Gln Glu Gly Asp Ser Ser Ser Glu Glu  
    370                                      375                                      380  
 Asp  
 385

&lt;210&gt; 3229

&lt;211&gt; 1008

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3229

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180



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 1008

&lt;210&gt; 3230

&lt;211&gt; 232

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3230

Met	Glu	Asp	Gly	Lys	Arg	Glu	Arg	Trp	Pro	Thr	Leu	Met	Glu	Arg	Leu
1				5					10					15	
Cys	Ser	Asp	Gly	Phe	Ala	Phe	Pro	Gln	Tyr	Pro	Ile	Lys	Pro	Tyr	His
			20					25					30		
Leu	Lys	Arg	Ile	His	Arg	Ala	Val	Leu	Arg	Gly	Asn	Leu	Glu	Glu	Leu
		35					40					45			
Lys	Tyr	Leu	Leu	Leu	Thr	Tyr	Tyr	Asp	Ile	Asn	Lys	Arg	Asp	Arg	Lys
	50					55					60				
Glu	Arg	Thr	Ala	Leu	His	Leu	Ala	Cys	Ala	Thr	Gly	Gln	Pro	Glu	Met
65					70					75				80	
Val	His	Leu	Leu	Val	Ser	Arg	Arg	Cys	Glu	Leu	Asn	Leu	Cys	Asp	Arg
				85					90					95	
Glu	Asp	Arg	Thr	Pro	Leu	Ile	Lys	Ala	Val	Gln	Leu	Arg	Gln	Glu	Ala
			100					105					110		
Cys	Ala	Thr	Leu	Leu	Leu	Gln	Asn	Gly	Ala	Asp	Pro	Asn	Ile	Thr	Asp
		115				120						125			
Val	Phe	Gly	Arg	Thr	Ala	Leu	His	Tyr	Ala	Val	Tyr	Asn	Glu	Asp	Thr
	130					135					140				
Ser	Met	Ile	Glu	Lys	Leu	Leu	Ser	His	Gly	Thr	Asn	Ile	Glu	Glu	Cys

145		150		155		160									
Ser	Lys	Asn	Glu	Tyr	Gln	Pro	Leu	Leu	Leu	Ala	Val	Ser	Arg	Arg	Lys
				165					170					175	
Val	Lys	Met	Val	Glu	Phe	Leu	Leu	Lys	Lys	Lys	Ala	Asn	Val	Asn	Ala
			180					185					190		
Ile	Asp	Tyr	Leu	Gly	Arg	Ser	Ala	Leu	Ile	Leu	Ala	Val	Thr	Leu	Gly
		195					200					205			
Glu	Lys	Asp	Ile	Val	Ile	Leu	Leu	Gln	His	Asn	Ile	Asp	Val	Phe	
	210					215				220					
Ser	Arg	Asp	Val	Tyr	Gly	Lys	Leu								
225					230										

&lt;210&gt; 3231

&lt;211&gt; 1367

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3231

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nnacgcgtga aggggaagtt tcgcctcaga aggctgcctc gctggtcaga attcgggtggc
60
gccacgtccg cccgtctccg ccttctgcat cgcggcttcg gcggttcca cctagacacc
120
taacagtcgc ggagccggcc gcgtcgtgag ggggtcggca cggggagtcg ggcggtcttg
180
tgcattcttg ctacctgttg gtcgaagatg tcggacatcg gagactgggt caggagcatc
240
ccggcgatca cgcgctattg gttcgccgcc accgtcgccg tgcccttggt cggcaaactc
300
ggcctcatca gcccggccta cctcttctc tggcccgaag ccttccttta tcgctttcag
360
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420
tatttggtca atttatattt cttatatcag tattctacgc gacttgaaac aggagctttt
480
gatgggaggc cagcagacta tttattcatg ctctcttcta actggatttg catcgtgatt
540
actggcttag caatggatat gcagttgctg atgattcctc tgatcatgtc agtactttat
600
gtctgggccc agctgaacag agacatgatt gtatcatttt ggtttggaac acgatttaag
660
gcctgctatt taccctgggt tacccttgga ttcaactata tcatcgaggg ctcggtaatc
720
aatgagctta ttggaaatct ggttgacat ctttattttt tcctaagtgt cagataacca
780
atggacttgg gaggaagaaa tttctatcc acacctcagt ttttgtaacc ctgggtgccc
840
agtaggagag gaggagtatc aggatttggg gtgccccctg ctagcatgag gcgagctgct
900
gatcagaatg gcggaggcgg gagacacaac tggggccagg gctttcgact tggagaccag
960
tgaaggggcg gcctcgggca gccgtcctc tcaagccaca tttcctccca gtgctgggtg
1020
cacttaacaa ctgcgttctg gctaacctg ttggacctga cccacctga atgtagtctt
1080

```

tcagtacgag acaaagtttc ttaaattccc aagaaaaata taagtgttcc acaagtttca  
 1140  
 cgattctcat tcaagtcctt actgctgtga agaacaaata ccaactgtgc aaattgcaaa  
 1200  
 actgactaca ttttttggtg tttttttttt tcccccttcc gttctgaata atggggtttta  
 1260  
 gcgggtccta gtctgctggc attgagctgg ggctgggtca ccaaaccctt cccaaaagga  
 1320  
 cccttatctc tttcttgac acatgcctct ctccccctt caccgct  
 1367

<210> 3232

<211> 251

<212> PRT

<213> Homo sapiens

<400> 3232

Met	Ser	Asp	Ile	Gly	Asp	Trp	Phe	Arg	Ser	Ile	Pro	Ala	Ile	Thr	Arg
1				5					10					15	
Tyr	Trp	Phe	Ala	Ala	Thr	Val	Ala	Val	Pro	Leu	Val	Gly	Lys	Leu	Gly
			20					25					30		
Leu	Ile	Ser	Pro	Ala	Tyr	Leu	Phe	Leu	Trp	Pro	Glu	Ala	Phe	Leu	Tyr
		35					40					45			
Arg	Phe	Gln	Ile	Trp	Arg	Pro	Ile	Thr	Ala	Thr	Phe	Tyr	Phe	Pro	Val
	50					55					60				
Gly	Pro	Gly	Thr	Gly	Phe	Leu	Tyr	Leu	Val	Asn	Leu	Tyr	Phe	Leu	Tyr
65					70					75				80	
Gln	Tyr	Ser	Thr	Arg	Leu	Glu	Thr	Gly	Ala	Phe	Asp	Gly	Arg	Pro	Ala
			85						90					95	
Asp	Tyr	Leu	Phe	Met	Leu	Leu	Phe	Asn	Trp	Ile	Cys	Ile	Val	Ile	Thr
		100						105					110		
Gly	Leu	Ala	Met	Asp	Met	Gln	Leu	Met	Ile	Pro	Leu	Ile	Met	Ser	
		115				120						125			
Val	Leu	Tyr	Val	Trp	Ala	Gln	Leu	Asn	Arg	Asp	Met	Ile	Val	Ser	Phe
	130					135					140				
Trp	Phe	Gly	Thr	Arg	Phe	Lys	Ala	Cys	Tyr	Leu	Pro	Trp	Val	Ile	Leu
145					150					155				160	
Gly	Phe	Asn	Tyr	Ile	Ile	Gly	Gly	Ser	Val	Ile	Asn	Glu	Leu	Ile	Gly
			165					170						175	
Asn	Leu	Val	Gly	His	Leu	Tyr	Phe	Phe	Leu	Met	Phe	Arg	Tyr	Pro	Met
		180						185					190		
Asp	Leu	Gly	Gly	Arg	Asn	Phe	Leu	Ser	Thr	Pro	Gln	Phe	Leu	Tyr	Arg
		195				200						205			
Trp	Leu	Pro	Ser	Arg	Arg	Gly	Gly	Val	Ser	Gly	Phe	Gly	Val	Pro	Pro
	210					215						220			
Ala	Ser	Met	Arg	Arg	Ala	Ala	Asp	Gln	Asn	Gly	Gly	Gly	Gly	Arg	His
225					230					235				240	
Asn	Trp	Gly	Gln	Gly	Phe	Arg	Leu	Gly	Asp	Gln					
			245					250							

<210> 3233

<211> 975

<212> DNA

<213> Homo sapiens

&lt;400&gt; 3233

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 accgttggtt accttggtggc ttcccatctg ttctttgtta tgtttgatg gtcctattgg  
 120  
 atgacaattt tcacatctcc cgcttcccc tccaaagagt tctactgtc caattctgaa  
 180  
 aaggaacgtt atgaaaaaga attcagccaa gaaagacaac aagaaattt gagaagagca  
 240  
 gcaagagctt tacctatcta taccacatca gcttcaaaaa ctatcagata ttgtgaaaaa  
 300  
 tgtcagctga ttaaacctga tggggcgcat cactgctcag cctgtgactc atgtattctt  
 360  
 aagatggatc atccctgtcc ttgggtgaat aactgtgtgg gattttctaa ttacaaattc  
 420  
 ttctgctgt ttttattgta ttccctatta tattgccttt tcgtggccgc acagttttag  
 480  
 agtacttaaa aaattttgga cgaaagaacc gacccaaacc cgggccaaaa ttccacgtac  
 540  
 tttttcttt tctttgtgtc tgcaatgttc ttcacagcg tcctctcact ttccagctac  
 600  
 cactgctggc tttaaacagc attgtccaca gctccgtctg cagggtcagg gcatggcctc  
 660  
 tctccgtgtt cctgtgaaga gccttcattg gaatcatccc gggacatata gcttgaatgt  
 720  
 gctgtctggc tagccctcc acaagtcggt cactctgcac aaggaatccg agagctcatc  
 780  
 aaggatcagc acggtctggg gcccaggtgg ggtggaacac gcacggtcca caagcaattc  
 840  
 tgtctttctc aaggcttttt cttgtgcagt atgaaatcct tcatatttca tatgaagtat  
 900  
 gtgccttctg gggcactgag ctcaggaact ccaaaaagac cccttcgggc cggatcccg  
 960  
 cttcaaggct gcccc  
 975

&lt;210&gt; 3234

&lt;211&gt; 159

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3234

Xaa	Ala	Tyr	Val	Val	Glu	Leu	Cys	Val	Phe	Thr	Ile	Phe	Gly	Asn	Glu
1				5					10					15	
Glu	Asn	Gly	Lys	Thr	Val	Val	Tyr	Leu	Val	Ala	Phe	His	Leu	Phe	Phe
			20					25					30		
Val	Met	Phe	Val	Trp	Ser	Tyr	Trp	Met	Thr	Ile	Phe	Thr	Ser	Pro	Ala
			35				40					45			
Ser	Pro	Ser	Lys	Glu	Phe	Tyr	Leu	Ser	Asn	Ser	Glu	Lys	Glu	Arg	Tyr
			50			55					60				
Glu	Lys	Glu	Phe	Ser	Gln	Glu	Arg	Gln	Gln	Glu	Ile	Leu	Arg	Arg	Ala
65					70					75				80	
Ala	Arg	Ala	Leu	Pro	Ile	Tyr	Thr	Thr	Ser	Ala	Ser	Lys	Thr	Ile	Arg

				85					90					95		
Tyr	Cys	Glu	Lys	Cys	Gln	Leu	Ile	Lys	Pro	Asp	Arg	Ala	His	His	Cys	
			100					105					110			
Ser	Ala	Cys	Asp	Ser	Cys	Ile	Leu	Lys	Met	Asp	His	Pro	Cys	Pro	Trp	
			115				120					125				
Val	Asn	Asn	Cys	Val	Gly	Phe	Ser	Asn	Tyr	Lys	Phe	Phe	Leu	Leu	Phe	
			130			135					140					
Leu	Leu	Tyr	Ser	Leu	Leu	Tyr	Cys	Leu	Phe	Val	Ala	Ala	Gln	Phe		
145					150					155						

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<210> 3235
<211> 551
<212> DNA
<213> Homo sapiens
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<400> 3235
ntggaaactg agcttcaaac atataagcat tctcgtcagg ggctagatga aatgtacaat
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gaagccagaa ggcagcttcg agatgaatct cagttacgac aggatgtaga gaatgagcta
120
gcagtacaag ttagtatgaa gcatgagatt gaacttgcca tgaagttgct ggagaaagat
180
atccatgaga aacaagatac tctgataggc cttcgacaac aactagagga agttaaaagca
240
attaacatag agatgtatca aaagttgcag ggttctgaag atggcttgaa agaaaaaaat
300
gaaataattg cccgactaga agaaaaaacc aataaaatta ctgcagccat gaggcagctg
360
gaacaaagat tgcagcaagc agagaaggcg caaatggaag ctgaagatga ggatgagaaa
420
tatctacaag aatgtctcag taaatctgat agtctgcaga aacaaatctc ccaaaggag
480
aaacagctgg tgcaactgga aactgacttg aagattgaga aggaatggag gcagactttg
540
caggaagatc t
551
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<210> 3236
<211> 183
<212> PRT
<213> Homo sapiens
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<400> 3236															
Xaa	Glu	Thr	Glu	Leu	Gln	Thr	Tyr	Lys	His	Ser	Arg	Gln	Gly	Leu	Asp
1				5					10					15	
Glu	Met	Tyr	Asn	Glu	Ala	Arg	Arg	Gln	Leu	Arg	Asp	Glu	Ser	Gln	Leu
			20					25					30		
Arg	Gln	Asp	Val	Glu	Asn	Glu	Leu	Ala	Val	Gln	Val	Ser	Met	Lys	His
		35					40					45			
Glu	Ile	Glu	Leu	Ala	Met	Lys	Leu	Leu	Glu	Lys	Asp	Ile	His	Glu	Lys
	50					55					60				
Gln	Asp	Thr	Leu	Ile	Gly	Leu	Arg	Gln	Gln	Leu	Glu	Glu	Val	Lys	Ala
65					70					75					80
Ile	Asn	Ile	Glu	Met	Tyr	Gln	Lys	Leu	Gln	Gly	Ser	Glu	Asp	Gly	Leu

			85					90					95				
Lys	Glu	Lys	Asn	Glu	Ile	Ile	Ala	Arg	Leu	Glu	Glu	Lys	Thr	Asn	Lys		
			100					105					110				
Ile	Thr	Ala	Ala	Met	Arg	Gln	Leu	Glu	Gln	Arg	Leu	Gln	Gln	Ala	Glu		
			115				120					125					
Lys	Ala	Gln	Met	Glu	Ala	Glu	Asp	Glu	Asp	Glu	Lys	Tyr	Leu	Gln	Glu		
			130				135				140						
Cys	Leu	Ser	Lys	Ser	Asp	Ser	Leu	Gln	Lys	Gln	Ile	Ser	Gln	Lys	Glu		
145					150				155						160		
Lys	Gln	Leu	Val	Gln	Leu	Glu	Thr	Asp	Leu	Lys	Ile	Glu	Lys	Glu	Trp		
			165					170						175			
Arg	Gln	Thr	Leu	Gln	Glu	Asp											
			180														

&lt;210&gt; 3237

&lt;211&gt; 1323

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3237

```

nctctgggct gcgacctacc tcgcagaggg gtttgcacta aggcgctggg cgccgggctc
60
cgggcgctgt ggacctggc tccgcccgcg gcgcctggcc gggaccgtgt gggccgtgag
120
gatgaggacc gttgggaagt acggggggac cgcaaggccc ggaagcccct ggtggagaag
180
aagcgacgcg cgcgatcaa cgagagtctt caggagtgtc ggctgctgct ggcgggcgcc
240
gaggtgcagg ccaagctgga gaacgccgaa gtgctggagc tgacgggtgcg gcgggtccag
300
ggtgtgctgc ggggccgggc gcgcgagcgc gagcagctgc aggcggaagc gagcgagcgc
360
ttcgctgccg gctacatcca gtgcatgcac gaggtgcaca cgttcgtgtc cacgtgccag
420
gccatcgacg ctaccgtcgc tgccgagctc ctgaaccatc tgctcgagtc catgccgctg
480
cgtgagggca gcagcttcca ggatctgctg ggggacgccc tggcggggcc acctagagcc
540
cctggacgga gtggctggcc tgcggggggc gctccgggat cccaatacc cagccccccg
600
ggtcctgggg acgacctgtg ctccgacctg gaggaggccc ctgaggctga actgagtcag
660
gctcctgctg aggggcccga cttggtgccc gcagccctgg gcagcctgac cacagcccaa
720
attgcccgga gtgtctggag gccttggtga ccaatgccag ccagagtcct gcgggggtgg
780
gcccggccct ccctggatct cctccctcct ccagggggtt cagatgtggt ggggtagggc
840
cctggaagtc tcccaggtct tccctccctc ctctgatgga tggcttgag ggcagccctc
900
ggtaaccagc ccagtcaggc ccagccccc tttcttaaga aacttttagg gaccctgcag
960
ctctggagtg ggtggaggga gggagctacg ggcaggagga agaattttgt agagctgcca
1020

```

gcgctctccc aggttcaccc acccaggctt caccagccct gtgcgggctc tgggggcaga  
 1080  
 ggtggcagaa atggtgctgg gcactagtgt tccaggcagc cctgggctaa aaaaaagctt  
 1140  
 gaacttgcca cttcagcggg gagatgagag gcagggtcac tcagctgcac tgcccagagc  
 1200  
 tgtgatgctc tgtacatctt gttttagca cacttgagtt tgtgtattcc attgacatca  
 1260  
 aatgtgacaa ttttactaaa taaagaattt tggagttagt tacccttgaa aaaaaagtcg  
 1320  
 acg  
 1323

<210> 3238

<211> 249

<212> PRT

<213> Homo sapiens

<400> 3238

Xaa	Leu	Gly	Cys	Asp	Leu	Pro	Arg	Arg	Gly	Val	Cys	Thr	Lys	Ala	Leu
1			5						10					15	
Gly	Ala	Gly	Leu	Arg	Ala	Leu	Trp	Thr	Met	Ala	Pro	Pro	Ala	Ala	Pro
			20					25					30		
Gly	Arg	Asp	Arg	Val	Gly	Arg	Glu	Asp	Glu	Asp	Arg	Trp	Glu	Val	Arg
		35					40					45			
Gly	Asp	Arg	Lys	Ala	Arg	Lys	Pro	Leu	Val	Glu	Lys	Lys	Arg	Arg	Ala
	50					55					60				
Arg	Ile	Asn	Glu	Ser	Leu	Gln	Glu	Leu	Arg	Leu	Leu	Leu	Ala	Gly	Ala
65					70					75				80	
Glu	Val	Gln	Ala	Lys	Leu	Glu	Asn	Ala	Glu	Val	Leu	Glu	Leu	Thr	Val
				85					90					95	
Arg	Arg	Val	Gln	Gly	Val	Leu	Arg	Gly	Arg	Ala	Arg	Glu	Arg	Glu	Gln
			100					105					110		
Leu	Gln	Ala	Glu	Ala	Ser	Glu	Arg	Phe	Ala	Ala	Gly	Tyr	Ile	Gln	Cys
		115					120					125			
Met	His	Glu	Val	His	Thr	Phe	Val	Ser	Thr	Cys	Gln	Ala	Ile	Asp	Ala
	130					135					140				
Thr	Val	Ala	Ala	Glu	Leu	Leu	Asn	His	Leu	Leu	Glu	Ser	Met	Pro	Leu
145					150					155				160	
Arg	Glu	Gly	Ser	Ser	Phe	Gln	Asp	Leu	Leu	Gly	Asp	Ala	Leu	Ala	Gly
			165						170					175	
Pro	Pro	Arg	Ala	Pro	Gly	Arg	Ser	Gly	Trp	Pro	Ala	Gly	Gly	Ala	Pro
			180					185						190	
Gly	Ser	Pro	Ile	Pro	Ser	Pro	Pro	Gly	Pro	Gly	Asp	Asp	Leu	Cys	Ser
	195					200					205				
Asp	Leu	Glu	Glu	Ala	Pro	Glu	Ala	Glu	Leu	Ser	Gln	Ala	Pro	Ala	Glu
	210					215					220				
Gly	Pro	Asp	Leu	Val	Pro	Ala	Ala	Leu	Gly	Ser	Leu	Thr	Thr	Ala	Gln
225					230					235					240
Ile	Ala	Arg	Ser	Val	Trp	Arg	Pro	Trp							
				245											

<210> 3239

<211> 432

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3239

aaaaccaaag attctcctgg agttttctct aaactgggtg ttctcctgag gagagtgaca  
 60  
 agaaacttgg tgagaaataa gctggcagtg attacgcgtc tccttcagaa tctgatcatg  
 120  
 ggtttggtcc tccttttctt cgttctgcgg gtccgaagca atgtgctaaa gggtgctatc  
 180  
 caggaccgcg taggtctcct ttaccagttt gtgggcgcca ccccgtaac aggcattgctg  
 240  
 aacgctgtga atctgtttcc cgtgctgcga gctgtcagcg accaggagag tcaggacggc  
 300  
 ctctaccaga agtggcagat gatgctggcc tatgcactgc acgtcctccc cttcagcgtt  
 360  
 gttgccacca tgattttcag cagtgtgtgc tactggacgc tgggcttaca tcctgagggt  
 420  
 gcccgattgg gt  
 432

&lt;210&gt; 3240

&lt;211&gt; 144

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3240

Lys	Thr	Lys	Asp	Ser	Pro	Gly	Val	Phe	Ser	Lys	Leu	Gly	Val	Leu	Leu
1				5					10					15	
Arg	Arg	Val	Thr	Arg	Asn	Leu	Val	Arg	Asn	Lys	Leu	Ala	Val	Ile	Thr
			20					25					30		
Arg	Leu	Leu	Gln	Asn	Leu	Ile	Met	Gly	Leu	Phe	Leu	Leu	Phe	Phe	Val
	35					40					45				
Leu	Arg	Val	Arg	Ser	Asn	Val	Leu	Lys	Gly	Ala	Ile	Gln	Asp	Arg	Val
	50				55					60					
Gly	Leu	Leu	Tyr	Gln	Phe	Val	Gly	Ala	Thr	Pro	Tyr	Thr	Gly	Met	Leu
65				70					75					80	
Asn	Ala	Val	Asn	Leu	Phe	Pro	Val	Leu	Arg	Ala	Val	Ser	Asp	Gln	Glu
			85					90					95		
Ser	Gln	Asp	Gly	Leu	Tyr	Gln	Lys	Trp	Gln	Met	Met	Leu	Ala	Tyr	Ala
	100						105					110			
Leu	His	Val	Leu	Pro	Phe	Ser	Val	Ala	Thr	Met	Ile	Phe	Ser	Ser	
	115					120					125				
Val	Cys	Tyr	Trp	Thr	Leu	Gly	Leu	His	Pro	Glu	Val	Ala	Arg	Leu	Gly
	130					135					140				

&lt;210&gt; 3241

&lt;211&gt; 492

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3241

gtggaatttt tttagacaaa gtctcaaaaa acaacaaaac aaacaaaagg taagataaat  
 60



acgaaaataca aaataagagg caggaagagc ccaaagcatc agaaatgtgc cagttataat  
120  
gggccaaaat cccctcttgt gtctccagaa gtatttgaaa aatacgttag gatctgcctc  
180  
acagacatgc tcccaggaca ctcgacagca aggaggtacg gcggggccag ccagccaagg  
240  
cagaggagga catcactgcc acagcagggg gcctgactgg cagcaaaagg gacgactccg  
300  
gcgaaaagtc agcaggaaac aggacagggg ctggaccaat ggccctccctc agccccacac  
360  
cccacccagg caggagcggg gcctggcccc gggcaggcgg gtgggagagc tcaactgagt  
420  
ggcagcaggg catggccctt gatgctgcag gtacccaggc tgcagctgca gaaacctcag  
480  
tggaaccca gg  
492

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<210> 3242
<211> 107
<212> PRT
<213> Homo sapiens
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<400> 3242
Met Gly Gln Asn Pro Leu Leu Cys Leu Gln Lys Tyr Leu Lys Asn Thr
  1              5              10              15
Leu Gly Ser Ala Ser Gln Thr Cys Ser Gln Asp Thr Arg Gln Gln Gly
              20              25              30
Gly Thr Ala Gly Pro Ala Ser Gln Gly Arg Gly Gly His His Cys His
              35              40              45
Ser Arg Gly Pro Asp Trp Gln Gln Lys Gly Arg Leu Arg Arg Lys Val
              50              55              60
Ser Arg Lys Gln Asp Arg Gly Trp Thr Asn Gly Leu Pro Gln Pro His
65              70              75              80
Thr Pro Pro Arg Gln Glu Arg Cys Leu Ala Arg Gly Arg Arg Val Gly
              85              90              95
Glu Leu Thr Glu Trp Ala Ala Gly His Gly Pro
              100              105

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<210> 3243
<211> 944
<212> DNA
<213> Homo sapiens
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180
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240
tacggttttc atggacgagg actcaaggca gaaaatggac aatttgagga atttggccag
300
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<210> 3244

<211> 314

<212> PRT

<213> Homo sapiens

<400> 3244

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Gly	Val	Thr	Lys	Gly	Lys	Val	Cys	Phe	Glu	Ala	Lys	Val	Thr	Gln	Asn
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Leu	Pro	Met	Lys	Glu	Gly	Cys	Thr	Glu	Val	Ser	Leu	Leu	Arg	Val	Gly
	50					55					60				
Trp	Ser	Val	Asp	Phe	Ser	Arg	Pro	Gln	Leu	Gly	Glu	Asp	Glu	Phe	Ser
65					70				75					80	
Tyr	Gly	Phe	Asp	Gly	Arg	Gly	Leu	Lys	Ala	Glu	Asn	Gly	Gln	Phe	Glu
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Asn	Phe	Glu	Thr	Glu	Glu	Val	Glu	Leu	Ser	Phe	Ser	Lys	Asn	Gly	Glu
			115				120					125			
Asp	Leu	Gly	Val	Ala	Phe	Trp	Ile	Ser	Lys	Asp	Ser	Leu	Ala	Asp	Arg
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Ala	Leu	Leu	Pro	His	Val	Leu	Cys	Lys	Asn	Cys	Val	Val	Glu	Leu	Asn
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Phe	Gly	Gln	Lys	Glu	Glu	Pro	Phe	Phe	Pro	Pro	Pro	Glu	Glu	Phe	Val
			165					170						175	
Phe	Ile	His	Ala	Val	Pro	Val	Glu	Glu	Arg	Val	Arg	Thr	Ala	Val	Pro
			180					185					190		
Pro	Lys	Thr	Ile	Glu	Glu	Cys	Glu	Val	Ile	Leu	Met	Val	Gly	Leu	Pro

	195		200		205
Gly	Ser Gly Lys Thr Gln Trp	Ala Leu Lys Tyr	Ala Lys Glu Asn Pro		
	210	215	220		
Glu	Lys Arg Tyr Asn Val Leu Gly Ala Glu Thr	Val Leu Asn Gln Met			
225		230	235		240
Arg	Met Lys Gly Leu Glu Glu Pro Glu Met Asp	Pro Lys Ser Arg Asp			
	245	250	255		
Leu	Leu Val Gln Gln Ala Ser Gln Cys Leu Ser	Lys Leu Val Gln Ile			
	260	265	270		
Ala	Ser Arg Thr Lys Arg Asn Phe Ile Leu Asp	Gln Cys Asn Val Tyr			
	275	280	285		
Asn	Ser Gly Gln Arg Arg Lys Leu Leu Leu Phe	Lys Thr Phe Ser Arg			
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305		310			

&lt;210&gt; 3245

&lt;211&gt; 980

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3245

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<210> 3246

<211> 219

<212> PRT

<213> Homo sapiens

<400> 3246

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			20				25						30		
Leu	Ala	Ser	Ile	Ile	Ala	Ala	Thr	Met	Ala	Arg	Thr	Val	Tyr	Cys	Thr
		35					40					45			
Asp	Val	Gly	Ala	Asp	Leu	Leu	Ser	Met	Cys	Gln	Arg	Asn	Ile	Ala	Leu
	50					55				60					
Asn	Ser	His	Leu	Ala	Ala	Thr	Gly	Gly	Gly	Ile	Val	Arg	Val	Lys	Glu
65					70					75					80
Leu	Asp	Trp	Leu	Lys	Asp	Asp	Leu	Cys	Thr	Asp	Pro	Lys	Val	Pro	Phe
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Ser	Trp	Ser	Gln	Glu	Glu	Ile	Ser	Asp	Leu	Tyr	Asp	His	Thr	Thr	Ile
			100					105					110		
Leu	Phe	Ala	Ala	Glu	Val	Phe	Tyr	Asp	Asp	Asp	Leu	Thr	Asp	Ala	Val
		115					120					125			
Phe	Lys	Thr	Leu	Ser	Arg	Leu	Ala	His	Arg	Leu	Lys	Asn	Ala	Cys	Thr
	130					135				140					
Ala	Ile	Leu	Ser	Val	Glu	Lys	Arg	Leu	Asn	Phe	Thr	Leu	Arg	His	Leu
145					150					155					160
Asp	Val	Thr	Cys	Glu	Ala	Tyr	Asp	His	Phe	Arg	Ser	Cys	Leu	His	Ala
			165						170					175	
Leu	Glu	Gln	Leu	Thr	Asp	Gly	Lys	Leu	Arg	Phe	Val	Val	Glu	Pro	Val
			180					185					190		
Glu	Ala	Ser	Phe	Pro	Gln	Leu	Leu	Val	Tyr	Glu	Arg	Leu	Gln	Gln	Leu
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<210> 3247

<211> 977

<212> DNA

<213> Homo sapiens

<400> 3247

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300

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&lt;210&gt; 3248

&lt;211&gt; 260

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3248

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		20						25					30		
Trp	Ala	Asp	Ile	Phe	Lys	Arg	Phe	Asn	Ser	Gly	Thr	Tyr	Asn	Asn	Gln
		35					40					45			
Trp	Met	Ile	Val	Asp	Tyr	Lys	Ala	Phe	Ile	Pro	Gly	Gly	Pro	Ser	Pro
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Gly	Ser	Arg	Val	Leu	Thr	Ile	Leu	Glu	Gln	Ile	Pro	Gly	Met	Val	Val
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Val	Ala	Asp	Lys	Thr	Ser	Glu	Leu	Tyr	Gln	Lys	Thr	Tyr	Trp	Ala	Ser
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Tyr	Asn	Ile	Pro	Ser	Phe	Glu	Thr	Val	Phe	Asn	Ala	Ser	Gly	Leu	Gln
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Ala	Leu	Val	Ala	Gln	Tyr	Gly	Asp	Trp	Phe	Ser	Tyr	Asp	Gly	Ser	Pro
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		130				135						140			
Ser	Met	Val	Arg	Leu	Met	Arg	Tyr	Asn	Asp	Phe	Leu	His	Asp	Pro	Leu
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Ser	Ala	Arg	Ser	Asp	Leu	Asn	Pro	Ala	Asn	Gly	Ser	Tyr	Pro	Phe	Gln



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<213> Homo sapiens
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Ala	Val	Leu	Arg	Glu	Asn	Ala	Arg	Leu	Gln	Arg	Asp	Asn	Glu	Arg	Leu	
385					390					395					400	
Gln	Arg	Glu	Leu	Glu	Ser	Ser	Ala	Glu	Lys	Ala	Gly	Arg	Ile	Glu	Lys	
				405					410					415		
Leu	Glu	Ser	Glu	Ile	Gln	Arg	Leu	Ser	Glu	Ala	His	Glu	Ser	Leu	Thr	
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Arg	Ala	Ser	Ser	Lys	Arg	Glu	Ala	Leu	Glu	Lys	Thr	Met	Arg	Asn	Lys	
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Met	Asp	Ser	Glu	Met	Arg	Arg	Leu	Gln	Asp	Phe	Asn	Arg	Asp	Leu	Arg	
	450					455					460					
Glu	Arg	Leu	Glu	Ser	Ala	Asn	Arg	Arg	Leu	Ala	Ser	Lys	Thr	Gln	Glu	
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Ala	Gln	Ala	Gly	Ser	Gln	Asp	Met	Val	Ala	Lys	Leu	Leu	Ala	Gln	Ser	
				485					490					495		
Tyr	Glu	Gln	Gln	Gln	Glu	Gln	Glu	Lys	Leu	Glu	Arg	Glu	Met	Ala	Leu	
			500					505					510			
Leu	Arg	Gly	Ala	Ile	Glu	Asp	Gln	Arg	Arg	Ala	Glu	Leu	Leu	Glu		
		515					520					525				
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	530					535					540					
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Leu	Arg	Leu	Arg	Thr	Arg	Leu	Glu	Gln	Glu	Leu	Lys	Ala	Leu	Arg	Ala	
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Gln	Gln	Arg	Gln	Ala	Gly	Ala	Pro	Gly	Gly	Ser	Ser	Gly	Ser	Gly	Gly	
		595					600					605				
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	610					615					620					
Glu	Glu	Gln	Ile	Leu	Ala	Leu	Glu	Ala	Asp	Met	Thr	Lys	Trp	Glu	Gln	
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Lys	Tyr	Leu	Glu	Glu	Arg	Ala	Met	Arg	Gln	Phe	Ala	Met	Asp	Ala	Ala	
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<212> DNA
<213> Homo sapiens
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120
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300
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480
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540
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<210> 3252  
 <211> 254  
 <212> PRT  
 <213> Homo sapiens

<400> 3252  
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 35 40 45  
 Leu Glu Asp Val Ser Arg Gly Gly Ser Pro Phe Ala Ile Val Ile Thr  
 50 55 60  
 Gln Gln His Gln Ile His Arg Ser Cys Thr Val Asn Ile Met Phe Gly  
 65 70 75 80  
 Thr Pro Gln Glu His Arg Asn Met Pro Gln Ala Asp Ala Met Val Leu  
 85 90 95  
 Val Ala Arg Asn Tyr Glu Arg Tyr Lys Asn Glu Cys Arg Glu Lys Glu  
 100 105 110  
 Arg Glu Glu Ile Ala Arg Gln Ala Ala Lys Met Ala Asp Glu Ala Ile  
 115 120 125  
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 130 135 140  
 His Pro Pro Ala Ile Gln Ser Leu Ile Asn Leu Leu Ala Asp Asn Arg  
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 Arg Lys Glu Arg Leu Met Arg Ser Ser Thr Asp Ser Leu Pro Gly Glu  
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 195 200 205  
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 <213> Homo sapiens

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&lt;210&gt; 3254

&lt;211&gt; 180

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3254

Met	Ala	Gly	Val	Lys	Tyr	Pro	Gly	Gln	Asp	Pro	Val	Asp	Leu	Asp	Ile
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Tyr	Gln	Ser	Ser	His	Met	Val	Asp	Tyr	Gln	Pro	Tyr	Arg	Lys	His	Lys
			20					25					30		
Tyr	Ser	Arg	Val	Thr	Pro	Gln	Glu	Gln	Ala	Lys	Leu	Asp	Ala	Gln	Leu
			35				40					45			
Arg	Asp	Lys	Glu	Phe	Tyr	Arg	Pro	Ile	Pro	Asn	Pro	Asn	Pro	Lys	Leu
	50				55					60					
Thr	Asp	Gly	Tyr	Pro	Ala	Phe	Lys	Arg	Pro	His	Met	Thr	Ala	Lys	Asp
65				70				75						80	
Leu	Gly	Leu	Pro	Gly	Phe	Phe	Pro	Ser	Gln	Glu	His	Glu	Ala	Thr	Arg
			85					90						95	
Glu	Asp	Glu	Arg	Lys	Phe	Thr	Ser	Thr	Cys	His	Phe	Thr	Tyr	Pro	Ala
			100				105						110		
Ser	His	Asp	Leu	His	Leu	Ala	Gln	Gly	Asp	Pro	Asn	Gln	Val	Leu	Gln
		115				120						125			
Ser	Ala	Asp	Phe	Pro	Cys	Leu	Val	Asp	Pro	Lys	His	Gln	Pro	Ala	Ala
	130					135					140				
Glu	Met	Ala	Lys	Gly	Tyr	Leu	Leu	Leu	Pro	Gly	Cys	Pro	Cys	Leu	His
145				150				155						160	
Cys	His	Ile	Val	Lys	Val	Pro	Ile	Leu	Asn	Arg	Trp	Gly	Pro	Leu	Met
			165				170							175	
Pro	Phe	Tyr	Gln												
			180												

&lt;210&gt; 3255

&lt;211&gt; 724

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3255

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 120  
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 180  
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 240  
 atcttggcgg acacatcaca gctagccgcg aatcccgaag ggtcagcaga gcctagaaag  
 300  
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 360  
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 420  
 tacaaattta aaaatggtgc tcgatataac ggagaatatg ttagaaataa aaagcacggt  
 480  
 caaggcactt ttatatatcc agatggatcc agatatgaag gagagtgggc aaatgacctg  
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<210> 3256

<211> 169

<212> PRT

<213> Homo sapiens

<400> 3256

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			20						25					30	
Gly	Arg	Asn	Glu	Ala	Gly	Glu	Arg	His	Gly	Arg	Gly	Arg	Ala	Arg	Leu
		35						40					45		
Pro	Asn	Gly	Asp	Thr	Tyr	Glu	Gly	Ser	Tyr	Glu	Phe	Gly	Lys	Arg	His
	50						55				60				
Gly	Gln	Gly	Ile	Tyr	Lys	Phe	Lys	Asn	Gly	Ala	Arg	Tyr	Ile	Gly	Glu
65					70					75				80	
Tyr	Val	Arg	Asn	Lys	Lys	His	Gly	Gln	Gly	Thr	Phe	Ile	Tyr	Pro	Asp
			85						90					95	
Gly	Ser	Arg	Tyr	Glu	Gly	Glu	Trp	Ala	Asn	Asp	Leu	Arg	His	Gly	His
			100					105					110		
Gly	Val	Tyr	Tyr	Tyr	Ile	Asn	Asn	Asp	Thr	Tyr	Thr	Gly	Glu	Trp	Phe
		115					120					125			
Ala	His	Gln	Arg	His	Gly	Gln	Gly	Thr	Tyr	Leu	Tyr	Ala	Glu	Thr	Gly
	130					135					140				
Ser	Lys	Tyr	Val	Gly	Thr	Trp	Val	Asn	Gly	Gln	Gln	Glu	Gly	Thr	Ala
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Glu	Leu	Ile	His	Leu	Asn	His	Arg	Tyr							

165

<210> 3257  
 <211> 368  
 <212> DNA  
 <213> Homo sapiens

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<210> 3258  
 <211> 122  
 <212> PRT  
 <213> Homo sapiens

<400> 3258  
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 20 25 30  
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 35 40 45  
 Lys Tyr Ser Pro Ile Tyr Ser Pro Asp Pro Tyr Tyr Ala Ser Glu Ser  
 50 55 60  
 Glu Tyr Trp Thr Tyr His Gly Ser Pro Lys Val Pro Arg Ala Arg Arg  
 65 70 75 80  
 Phe Ser Ser Gly Gly Glu Glu Asp Asp Phe Asp Arg Ser Met His Lys  
 85 90 95  
 Leu Gln Ser Gly Ile Gly Arg Leu Ile Leu Lys Glu Glu Met Lys Ala  
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 Arg Ser Ser Ser Tyr Ala Asp Pro Trp Arg  
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<210> 3259  
 <211> 747  
 <212> DNA  
 <213> Homo sapiens

<400> 3259  
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 240  
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<210> 3260

<211> 197

<212> PRT

<213> Homo sapiens

<400> 3260

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Leu	Val	His	Leu	Met	Thr	Ser	Asn	Pro	Lys	Ile	Leu	Tyr	Ala	Pro	Ala	20	25	30	
Gly	Ser	Glu	Val	Asp	Arg	Val	Ile	Leu	Lys	Ala	Asn	Glu	Thr	Phe	Ala	35	40	45	
Phe	Val	Gly	Asn	Val	Thr	His	Tyr	Ala	Gln	Val	Trp	Leu	Asn	Ile	Ser	50	55	60	
Ala	Glu	Ile	Arg	Ser	Phe	Leu	Glu	Gln	Gly	Arg	Leu	Gln	Gln	His	Leu	65	70	75	80
Arg	Trp	Leu	Gln	Gln	Tyr	Val	Ala	Glu	Leu	Arg	Leu	His	Pro	Glu	Ala	85	90	95	
Leu	Asn	Leu	Ser	Leu	Asp	Glu	Leu	Pro	Pro	Ala	Leu	Arg	Gln	Asp	Asn	100	105	110	
Phe	Ser	Leu	Pro	Ser	Gly	Met	Ala	Leu	Leu	Gln	Gln	Leu	Asp	Thr	Ile	115	120	125	
Asp	Asn	Ala	Ala	Cys	Gly	Trp	Ile	Gln	Phe	Met	Ser	Lys	Val	Ser	Val	130	135	140	
Asp	Ile	Phe	Lys	Gly	Phe	Pro	Asp	Glu	Glu	Ser	Ile	Val	Asn	Tyr	Thr	145	150	155	160
Leu	Asn	Gln	Ala	Tyr	Gln	Asp	Asn	Val	Thr	Val	Phe	Ala	Ser	Val	Ile	165	170	175	
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 Ser Ala Arg Thr Pro  
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 <210> 3261  
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 <212> DNA  
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<210> 3262  
<211> 81  
<212> PRT  
<213> Homo sapiens

<400> 3262  
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Glu Phe Asp Lys Phe Leu Glu Glu Arg Ala Lys Ala Ala Glu Met Val  
35 40 45  
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50 55 60  
Pro Ser Gly Arg Lys Lys Pro Glu Arg Ser Glu Asp Ala Leu Phe Ala  
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<210> 3263  
<211> 1128  
<212> DNA  
<213> Homo sapiens

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240  
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<210> 3264

<211> 308

<212> PRT

<213> Homo sapiens

<400> 3264

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			20					25					30		
Ser	Ser	Asp	Ser	Glu	Pro	Glu	Ala	Glu	Leu	Glu	Arg	Glu	Ala	Lys	Lys
		35					40					45			
Ser	Ala	Lys	Lys	Pro	Gln	Ser	Ser	Ser	Thr	Glu	Pro	Ala	Arg	Lys	Pro
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Gly	Gln	Lys	Glu	Lys	Arg	Val	Arg	Pro	Glu	Glu	Lys	Gln	Gln	Ala	Lys
65					70					75					80
Pro	Val	Lys	Val	Glu	Arg	Thr	Arg	Lys	Arg	Ser	Glu	Gly	Phe	Ser	Met
				85					90					95	
Asp	Arg	Lys	Val	Glu	Lys	Lys	Lys	Glu	Pro	Ser	Val	Glu	Glu	Lys	Leu
			100					105					110		
Gln	Lys	Leu	His	Ser	Glu	Ile	Lys	Phe	Ala	Leu	Lys	Val	Asp	Ser	Pro
	115						120					125			
Asp	Val	Lys	Gly	Cys	Leu	Asn	Ala	Leu	Glu	Glu	Leu	Gly	Thr	Leu	Gln
	130					135					140				
Val	Thr	Ser	Gln	Ile	Leu	Gln	Lys	Asn	Thr	Asp	Val	Val	Ala	Thr	Leu
145					150					155					160
Lys	Lys	Ile	Arg	Arg	Tyr	Lys	Ala	Asn	Lys	Asp	Val	Met	Glu	Lys	Ala
			165					170						175	
Ala	Glu	Val	Tyr	Thr	Arg	Leu	Lys	Ser	Arg	Val	Leu	Gly	Pro	Lys	Ile
			180					185					190		
Glu	Ala	Val	Gln	Lys	Val	Asn	Lys	Ala	Gly	Met	Glu	Lys	Glu	Lys	Ala
	195						200					205			
Glu	Glu	Lys	Leu	Ala	Gly	Glu	Glu	Leu	Ala	Gly	Glu	Glu	Ala	Pro	Gln
	210					215					220				
Glu	Lys	Ala	Glu	Asp	Lys	Pro	Ser	Thr	Asp	Leu	Ser	Ala	Pro	Val	Asn
225					230					235					240
Gly	Glu	Ala	Thr	Ser	Gln	Lys	Gly	Glu	Ser	Ala	Glu	Asp	Lys	Glu	His
			245					250						255	
Glu	Glu	Gly	Arg	Asp	Ser	Glu	Glu	Gly	Pro	Arg	Cys	Gly	Ser	Ser	Glu
			260					265					270		
Asp	Leu	His	Asp	Ser	Val	Arg	Glu	Gly	Pro	Asp	Leu	Asp	Arg	Pro	Gly

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<210> 3267
<211> 393
<212> DNA
<213> Homo sapiens
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&lt;400&gt; 3267

gtcgaatatg catgcagagt acaggggttta gaacatgaca tggaagagat caatgctcga  
60  
tggaatacat tgaataaaaa ggctgcacaa agaattgcac agctacagga agctttgttg  
120  
cattgtggga agtttcaaga tgccttggag ccattgctca gctggttggc agataccgag  
180  
gagctcatag ccaatcagaa acctccatct gctgagtata aagtggtgaa agcacagatc  
240  
caagaacaga agttgctcca ggggtccta gatgatcgaa aggccacagt agacatgctt  
300  
caagcagaag gaggcagaat agcccagtca gcagagctgg ctgatagaga gaaaatcact  
360  
ggacagctgg agagtcttga aagtagatgg act  
393

&lt;210&gt; 3268

&lt;211&gt; 131

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3268

Val	Glu	Tyr	Ala	Cys	Arg	Val	Gln	Gly	Leu	Glu	His	Asp	Met	Glu	Glu
1				5					10					15	
Ile	Asn	Ala	Arg	Trp	Asn	Thr	Leu	Asn	Lys	Lys	Val	Ala	Gln	Arg	Ile
		20						25					30		
Ala	Gln	Leu	Gln	Glu	Ala	Leu	Leu	His	Cys	Gly	Lys	Phe	Gln	Asp	Ala
		35					40					45			
Leu	Glu	Pro	Leu	Leu	Ser	Trp	Leu	Ala	Asp	Thr	Glu	Glu	Leu	Ile	Ala
		50				55					60				
Asn	Gln	Lys	Pro	Pro	Ser	Ala	Glu	Tyr	Lys	Val	Val	Lys	Ala	Gln	Ile
65					70					75				80	
Gln	Glu	Gln	Lys	Leu	Leu	Gln	Arg	Leu	Leu	Asp	Asp	Arg	Lys	Ala	Thr
				85					90					95	
Val	Asp	Met	Leu	Gln	Ala	Glu	Gly	Gly	Arg	Ile	Ala	Gln	Ser	Ala	Glu
			100					105						110	
Leu	Ala	Asp	Arg	Glu	Lys	Ile	Thr	Gly	Gln	Leu	Glu	Ser	Leu	Glu	Ser
		115					120						125		
Arg	Trp	Thr													
		130													

&lt;210&gt; 3269

&lt;211&gt; 1423

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3269

ctgtatcaaa aataatagta actttttgaa tatacacaat ttatctagaa tctatttttcc  
60  
tttgaagctg taacttttatg agcgattatt tactaccttt gagaaatgtg ttttagtata  
120  
aatatagga tgtggaagcg aaaaaatata tgggtagcaa gtgaggtgta ctcaaaaata  
180

agcaaaagtc acgtgggtct gattttatac cctcgctgga aagcttggtc tcagacacac  
 240  
 tgttactgca agtgtgtgtg agggggaaac tctcacacac tttgcagttg aggacagggc  
 300  
 tagactttga ggtggaccct ggctcccagg gctgtgtact cccagcccgt gtttctcttt  
 360  
 tgctcagact gaacaagtgg aacgaaatta cattaagaa aagaaggcag cagtgaagaa  
 420  
 atttgaagac aagaagggtg agctgaaaga gaacctgatt gctgagctag aagaaaagaa  
 480  
 gaaaatgatt gaaaacgaaa tgctgacaat ggaactgaat ggagattcta tggaggtgaa  
 540  
 acctatcatg accagaaagt tgcggaggcg accaaatgat cccgtcccca tcccagacaa  
 600  
 gaggaggaaa cctgctccag cccagctaaa ctatttgta acagatgaac agatcatgga  
 660  
 ggatctgaga acattaaata agcttaagtc acccaagaga ccagcatctc catcctctcc  
 720  
 tgagcacttg cctgcaacac ccgcggaatc tccagcacag agatttgagg cgcggataga  
 780  
 agatggcaaa ctgtattatg acaaaagatg gtaccacaag agccaggcca tctatctgga  
 840  
 gtcaaaggac aaccagaaac tgagctgcgt gatcagttct gtaggagcca atgagatctg  
 900  
 ggtgaggaag acaagtgaca gcaccaagat gaggatctac ctgggtcagc ttcagcgagg  
 960  
 gctcttcgtg atccgccggc gctcagctgc ttgactttct acagtgtctc tctcttgacc  
 1020  
 ctttttctgg agtgggtttt atttttgttt tgtttcgttt tctccttaat agaaaaatgt  
 1080  
 taacttactg ggaatagcta ctcagccttg gaaatggaga gcactgcagt gaattcttta  
 1140  
 gggcactttt gtggccggat gcttccaact ttgtcagttc tttctgcctc aacttcttcc  
 1200  
 agacatcagt caccatgaga ctgttttact ttcaggcgta ttgggggggt tgatttactt  
 1260  
 tccttttatt tctttatttt ttgcttatac ttgtttttga aaacctctc tgagtttgaa  
 1320  
 gggacagcta tttttattga ttatctttaa gtctctctac catggagaag agcaggaagg  
 1380  
 gatacactct ccagtgcatt ttcattgttt gaatcggatt agt  
 1423

&lt;210&gt; 3270

&lt;211&gt; 169

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3270

Met	Ile	Glu	Asn	Glu	Met	Leu	Thr	Met	Glu	Leu	Asn	Gly	Asp	Ser	Met
1				5					10					15	
Glu	Val	Lys	Pro	Ile	Met	Thr	Arg	Lys	Leu	Arg	Arg	Arg	Pro	Asn	Asp
			20					25					30		
Pro	Val	Pro	Ile	Pro	Asp	Lys	Arg	Arg	Lys	Pro	Ala	Pro	Ala	Gln	Leu

[illegible]

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<210> 3271
<211> 464
<212> DNA
<213> Homo sapiens
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<400> 3271
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gaaggcactg gggatacagc cgagcacaag atggacagag atccctggcc cctcggagca
120
ggcagtctgt ggctctggcc cctccagttc cttgtcacca ggagataggc aatgcagctg
180
atgagaaggg ccccggcagc aagagatcca atgatggtgg ccgccaggat cccagcgttg
240
gtgggcaggt gtgtactggg cagctcctta ttcttttcag ctacctggac ctcagtcttg
300
gccttcatag tccattcaga gttgatggtg atggctactt ggtaggtgcc actgtctgta
360
ggctggggcg ggcgcagcag catggaacca ttggggaagc ccacgatgtc tcgctgtccc
420
atggcactgc catccctctg aggccgttgt atccccaggg atgt
464

```

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<210> 3272
<211> 140
<212> PRT
<213> Homo sapiens
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```

<400> 3272
Met Gly Gln Arg Asp Ile Val Gly Phe Pro Asn Gly Ser Met Leu Leu
 1                    5              10              15
Arg Arg Ala Gln Pro Thr Asp Ser Gly Thr Tyr Gln Val Ala Ile Thr
      20              25              30
Ile Asn Ser Glu Trp Thr Met Lys Ala Lys Thr Glu Val Gln Val Ala
      35              40              45
Glu Lys Asn Lys Glu Leu Pro Ser Thr His Leu Pro Thr Asn Ala Gly

```



50		55		60	
Ile Leu Ala Ala Thr	Ile Ile Gly Ser Leu	Ala Ala Gly Ala Leu Leu			
65	70	75	80		
Ile Ser Cys Ile Ala Tyr	Leu Leu Val Thr Arg	Asn Trp Arg Gly Gln			
	85	90	95		
Ser His Arg Leu Pro Ala	Pro Arg Gly Gln Gly	Ser Leu Ser Ile Leu			
	100	105	110		
Cys Ser Ala Val Ser Pro	Val Pro Ser Val Thr	Pro Ser Thr Trp Met			
	115	120	125		
Ala Thr Thr Glu Lys Pro	Glu Leu Gly Pro Ala His				
	130	135	140		

&lt;210&gt; 3273

&lt;211&gt; 387

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3273

```

ngcgcgccag ggatggaaaa ctttattctg tatgaggaga tcggaagagg aagcaagact
60
gttgtctata aagggcgacg gaagggaaca atcaattttg tagccattct ttgtactgat
120
aagtgcagaa ggcctgaaat aaccaactgg gtccgtctca cccgtgaaat aaaacacaag
180
aatattgtaa cttttcatga atggtatgaa acaagcaacc acctctggct agtgggtggaa
240
ctccgcacag gtggttcctt aaaaacagtt attgctcaag atgaaaacct cccagaagat
300
gttgtgagag aatttggaat tgacctgatt agtggattac atcatcttca taaacttggc
360
attctctttg tgacatttct cctagga
387

```

&lt;210&gt; 3274

&lt;211&gt; 129

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3274

Xaa Ala Pro Gly Met Glu Asn Phe Ile Leu Tyr Glu Glu Ile Gly Arg	
1	5 10 15
Gly Ser Lys Thr Val Val Tyr Lys Gly Arg Arg Lys Gly Thr Ile Asn	
	20 25 30
Phe Val Ala Ile Leu Cys Thr Asp Lys Cys Arg Arg Pro Glu Ile Thr	
	35 40 45
Asn Trp Val Arg Leu Thr Arg Glu Ile Lys His Lys Asn Ile Val Thr	
	50 55 60
Phe His Glu Trp Tyr Glu Thr Ser Asn His Leu Trp Leu Val Val Glu	
65	70 75 80
Leu Arg Thr Gly Gly Ser Leu Lys Thr Val Ile Ala Gln Asp Glu Asn	
	85 90 95
Leu Pro Glu Asp Val Val Arg Glu Phe Gly Ile Asp Leu Ile Ser Gly	
	100 105 110
Leu His His Leu His Lys Leu Gly Ile Leu Phe Val Thr Phe Leu Leu	

115                                      120                                      125  
 Gly  
  
 <210> 3275  
 <211> 1266  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 3275  
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 60  
 agaacacatg aaaggaatac atggggaaga aataaagtag aaccaagag ttcttttaag  
 120  
 ttttctttta tagagacatg aataacagat acactgaagt ataaacaaaa attggcctga  
 180  
 agcgtccggt ggccggctta gtaggagct atggctaaac atcatcctga ttgatcttt  
 240  
 tgccgcaagc aggtcgtgtg tgccatcgga agactgtgtg aaaaatgtga tggcaagtgt  
 300  
 gtgatttgtg actcctatgt gcgtccctgc actctggtgc gcatatgtga tgagtgtaac  
 360  
 tatggatctt accaggggag ctgtgtgatc tgtggaggac ctggggtctc tgatgcctat  
 420  
 tattgtaagg agtgcaccat ccaggagaag gacagagatg gctgccccaa gattgtcaat  
 480  
 ctggggagct ctaagacaga cctcttctat gaacgcaaaa aatacggctt caagaagagg  
 540  
 tgattggtgg gtggccctt cctcccccca acatcagtct gctgcagctg ccagaaaaca  
 600  
 tgcctactac taccagcaga aaggagcag agcccagagc atcaccagga gtgcctgcta  
 660  
 gtgtactggc agcttgccac cccctcctct cccttcacc agacacgtgg tagggatgga  
 720  
 aaaggattct tcacagagca ctctggcaca ccatatcgga gaaaaattga tagattagtt  
 780  
 aatggttttt cttgaattcg agaagcatag atctgttctc catattggta tgttctccct  
 840  
 caaccaagat cttctaaaaa gaaataatat tttagtcttc tgcttgagga actgactgtg  
 900  
 aagcgacgcc cagtgaaaaa catgatcttg cagcagctct ggtggcagct gtccttgagg  
 960  
 aaccttttgt gtgtggtggg aagctatcag aacaagaaat gtaggcattt cccgtttttt  
 1020  
 ttgggggggg ggtggggggg cagggtctctg ccctcttgaa aggcatttac ttgtttaaca  
 1080  
 cttgtccagc tacagtgggg tacagtagct ggctattcac aggcattcat atagcccact  
 1140  
 agtctcatat ttttttctt ttgagaaatt ggaaactctt tctgttgcta ttatattaat  
 1200  
 aaagtgtgtg tttattttct ggtaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa  
 1260  
 aaaaaa  
 1266

<210> 3276  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 3276  
 Met Ala Lys His His Pro Asp Leu Ile Phe Cys Arg Lys Gln Ala Gly  
 1 5 10 15  
 Val Ala Ile Gly Arg Leu Cys Glu Lys Cys Asp Gly Lys Cys Val Ile  
 20 25 30  
 Cys Asp Ser Tyr Val Arg Pro Cys Thr Leu Val Arg Ile Cys Asp Glu  
 35 40 45  
 Cys Asn Tyr Gly Ser Tyr Gln Gly Arg Cys Val Ile Cys Gly Gly Pro  
 50 55 60  
 Gly Val Ser Asp Ala Tyr Tyr Cys Lys Glu Cys Thr Ile Gln Glu Lys  
 65 70 75 80  
 Asp Arg Asp Gly Cys Pro Lys Ile Val Asn Leu Gly Ser Ser Lys Thr  
 85 90 95  
 Asp Leu Phe Tyr Glu Arg Lys Lys Tyr Gly Phe Lys Lys Arg  
 100 105 110

<210> 3277  
 <211> 1435  
 <212> DNA  
 <213> Homo sapiens

<400> 3277  
 ncctccgtct ccgagaacaa caacaacagc aacaagaaaa caacaataaa aaaaataagg  
 60  
 ctgcgtggga ggcagaaaga gctaattgcgg ccacgcttgt ccctcggcca ccgtcccacc  
 120  
 cagacttccg tctccttaaa atgttcatgc gtaagtgcgt ggcagaagcg gctcaagcgc  
 180  
 actcgtgcgt cattgctgtc agggccgagg gagcggtgca aggccgccgc gtgacgtcag  
 240  
 gacgccgagg tcaggacgtc gaagccaaag aagaccagag ccagccgggt ggcacagcgg  
 300  
 tgcgtggcc gtgttgctga tcgcctgggt ggttggtggc gtgtccctgc agcgaaggat  
 360  
 cctgggtggc agtgaaaaag cagtctggct cccgaggtcc accccttata cccaaggctc  
 420  
 cagatggcgg ccaacgtggg tgatcaacgt agcacagatt ggtcttctca gtacagcatg  
 480  
 gtggctgggg caggccgaga gaatggcatg gagacgccga tgcacgagaa cccggagtgg  
 540  
 gagaaggccc gtcaggccct ggccagcatc agcaagtcag gagctgccgg cggctctgcc  
 600  
 aagtccagca gcaatgggccc tgtggccagt gcaagtacgt gtcccaggca gaagcctcag  
 660  
 ctttgcagca gcagcagtag taccagtggg accagcagta caactatgcc tacccttaca  
 720  
 gctactacta tcccatgagc atgtaccaga gctatggctc cccttcccag tatgggatgg  
 780

ccggctccta tggctagcca caccacagca gccatccgca ccccaacacc aagggactct  
 840  
 gaaccagccc ccagtccccg gcatggatga gagcatgtcc taccaggctc cccctcagca  
 900  
 gctgccgtcg gctcagcccc ctcagccctc aaatccccc catggggctc acacgtgaa  
 960  
 cagtggccct cagcctggga cagctccagc cacacagcan ncagccaggc ggggcccgc  
 1020  
 acgggccagg cctatgggccc acacacctac accgaacctg ccaagcccaa gaagggccaa  
 1080  
 cagctgtgga accgcatgaa acccgcccct gggactggag gttcaagtcc aacatccaga  
 1140  
 agcgaccctt tgctgttacc acccagagct ttggctccaa cgagagggc cagcacagt  
 1200  
 gttttggccc ccagcccaac cctgagaaag ttcagaacca cagcgggtcc tctgcccggg  
 1260  
 ggaacctgtc tgggaagccc gatgactggc cccaggacat gaaagagtat gtggagcgct  
 1320  
 gcttcaccgc ctgtgagtcg gaggaggaca aggaccgcac ggaaaagtct ctcaaggagg  
 1380  
 tgctgcaggc gcggctgcag gacggctcgg cctataccat tgactggagc cggga  
 1435

<210> 3278

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3278

Met	Ala	Ala	Asn	Val	Gly	Asp	Gln	Arg	Ser	Thr	Asp	Trp	Ser	Ser	Gln
1				5				10					15		
Tyr	Ser	Met	Val	Ala	Gly	Ala	Gly	Arg	Glu	Asn	Gly	Met	Glu	Thr	Pro
			20					25					30		
Met	His	Glu	Asn	Pro	Glu	Trp	Glu	Lys	Ala	Arg	Gln	Ala	Leu	Ala	Ser
			35					40				45			
Ile	Ser	Lys	Ser	Gly	Ala	Ala	Gly	Gly	Ser	Ala	Lys	Ser	Ser	Ser	Asn
			50				55				60				
Gly	Pro	Val	Ala	Ser	Ala	Ser	Thr	Cys	Pro	Arg	Gln	Lys	Pro	Gln	Leu
65					70					75				80	
Cys	Ser	Ser	Ser	Ser	Thr	Thr	Ser	Gly	Thr	Ser	Ser	Thr	Thr	Met	Pro
				85				90						95	
Thr	Pro	Thr	Ala	Thr	Thr	Ile	Pro								
				100											

<210> 3279

<211> 1130

<212> DNA

<213> Homo sapiens

<400> 3279

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 ccaagcagct ccccatcgct ccggaaacgg ctgcagctcc tgcccccaag ccggccccca  
 120

cctgagccag aaccaggcac catggtggag aagggatcag atagctcctc agagaagggg  
 180  
 ggggtgcctg ggacccccag caccagagc ctaggcagcc ggaacttcat ccgcaacagc  
 240  
 aagaagatgc agagctggta cagtatgctg agccccactt ataagcagcg taatgaggac  
 300  
 ttccggaaac tgttcagcaa actccccgaa gcagaacgcc tcattgtgga ttactcctgc  
 360  
 gccctgcagc gtgagatcct gctccagggc cgcctctacc tctctgagaa ctggatctgc  
 420  
 ttctacagca acatcttccg ctgggagacc acgatctcca tccagctgaa ggaagtgaca  
 480  
 tgtctgaaga aggaaaagac ggccaagctg atccccaacg ccatccagat ctgcacggag  
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 660  
 gtgcatcagt gctacggctc agagctgggc ctcaccagtg aggatgagga ctatgtctcc  
 720  
 ccttgcagc tgaacgggtc ggggaccccc aaggaagtgg gagatgtgat cgcctgagc  
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 gaggacaagg aggagcaggt agacagccag ccagacgcct cctccagcca gacagtgacc  
 960  
 ccggtggctg aacccccgag cacagagccc acccagcctg acgggcccac caccctgggc  
 1020  
 cccttggate tgctgcccag tgaggagcta ttgacagaca caagtaactc ctcttcatcc  
 1080  
 actggggagg aagcggactt ggctgcctg cttcccgacc tctccggccg  
 1130

<210> 3280

<211> 376

<212> PRT

<213> Homo sapiens

<400> 3280

Xaa	Arg	Ala	His	Arg	Ala	Ala	Ser	Met	Phe	Asp	Thr	Thr	Pro	His	Ser
1				5					10					15	
Gly	Arg	Ser	Thr	Pro	Ser	Ser	Ser	Pro	Ser	Leu	Arg	Lys	Arg	Leu	Gln
			20					25					30		
Leu	Leu	Pro	Pro	Ser	Arg	Pro	Pro	Pro	Glu	Pro	Glu	Pro	Gly	Thr	Met
			35					40					45		
Val	Glu	Lys	Gly	Ser	Asp	Ser	Ser	Ser	Glu	Lys	Gly	Gly	Val	Pro	Gly
			50					55				60			
Thr	Pro	Ser	Thr	Gln	Ser	Leu	Gly	Ser	Arg	Asn	Phe	Ile	Arg	Asn	Ser
65						70				75				80	
Lys	Lys	Met	Gln	Ser	Trp	Tyr	Ser	Met	Leu	Ser	Pro	Thr	Tyr	Lys	Gln
					85					90				95	
Arg	Asn	Glu	Asp	Phe	Arg	Lys	Leu	Phe	Ser	Lys	Leu	Pro	Glu	Ala	Glu

100 105 110  
 Arg Leu Ile Val Asp Tyr Ser Cys Ala Leu Gln Arg Glu Ile Leu Leu  
 115 120 125  
 Gln Gly Arg Leu Tyr Leu Ser Glu Asn Trp Ile Cys Phe Tyr Ser Asn  
 130 135 140  
 Ile Phe Arg Trp Glu Thr Thr Ile Ser Ile Gln Leu Lys Glu Val Thr  
 145 150 155 160  
 Cys Leu Lys Lys Glu Lys Thr Ala Lys Leu Ile Pro Asn Ala Ile Gln  
 165 170 175  
 Ile Cys Thr Glu Ser Glu Lys His Phe Phe Thr Ser Phe Gly Ala Arg  
 180 185 190  
 Asp Arg Cys Phe Leu Leu Ile Phe Arg Leu Trp Gln Asn Ala Leu Leu  
 195 200 205  
 Glu Lys Thr Leu Ser Pro Arg Glu Leu Trp His Leu Val His Gln Cys  
 210 215 220  
 Tyr Gly Ser Glu Leu Gly Leu Thr Ser Glu Asp Glu Asp Tyr Val Ser  
 225 230 235 240  
 Pro Leu Gln Leu Asn Gly Leu Gly Thr Pro Lys Glu Val Gly Asp Val  
 245 250 255  
 Ile Ala Leu Ser Asp Ile Thr Ser Ser Gly Ala Ala Asp Arg Ser Gln  
 260 265 270  
 Glu Pro Ser Pro Val Gly Ser Arg Arg Gly His Val Thr Pro Asn Leu  
 275 280 285  
 Ser Arg Ala Ser Ser Asp Ala Asp His Gly Ala Glu Glu Asp Lys Glu  
 290 295 300  
 Glu Gln Val Asp Ser Gln Pro Asp Ala Ser Ser Ser Gln Thr Val Thr  
 305 310 315 320  
 Pro Val Ala Glu Pro Pro Ser Thr Glu Pro Thr Gln Pro Asp Gly Pro  
 325 330 335  
 Thr Thr Leu Gly Pro Leu Asp Leu Leu Pro Ser Glu Glu Leu Leu Thr  
 340 345 350  
 Asp Thr Ser Asn Ser Ser Ser Ser Thr Gly Glu Glu Ala Asp Leu Ala  
 355 360 365  
 Ala Leu Leu Pro Asp Leu Ser Gly  
 370 375

&lt;210&gt; 3281

&lt;211&gt; 842

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3281

gaattctgcc ttgccgtgtg cctcattggc caaaggaaag caacagagtc tgcagccagg  
 60  
 gcaggacccg caggagggggc ctggacccgg ggggctcctg gcagcgctgt gcctttctga  
 120  
 ggcaaggagg tagagccagc ggctgaggac ctgtcagggc cagtcccagc tctgcagctt  
 180  
 gctgtgtgac ctggcacaca tectctccct gctcctctca gtctcttccc ctgcaagacg  
 240  
 gggctctgac acggatctca tgggattgct ctgaggccca ggagtcacca ggctcaacca  
 300  
 ctggttcaca aagtgtgttg tttccaggaa gaacagatgg gggcgctga gggcaaaggg  
 360

cctgagtgtg ggtcgaggat atgccggctg ctgctcagg ggctggggtt tcattctgtg  
 420  
 tgtcttgaca ggggtgtgaca cttggcacca cactgttccc tgteccctca tggatgtggc  
 480  
 ccacatgatg ttcctttcct cttgcaaaaag aagttgctgg aaggccact gtccagcagc  
 540  
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 720  
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 842

<210> 3282  
 <211> 146  
 <212> PRT  
 <213> Homo sapiens

<400> 3282  
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 20 25 30  
 Pro Trp Pro Arg Gln Pro Gly Gly Cys Trp Thr Val Gly Leu Pro Ala  
 35 40 45  
 Thr Ser Phe Ala Arg Gly Lys Glu His His Val Gly His Ile His Glu  
 50 55 60  
 Gly Thr Gly Asn Ser Val Val Pro Ser Val Thr Pro Cys Gln Asp Thr  
 65 70 75 80  
 Gln Asp Glu Asn Pro Ala Pro Glu Arg Ala Ala Gly Ile Ser Ser Thr  
 85 90 95  
 His Thr Gln Ala Leu Cys Pro Gln Ala Pro Pro Ser Val Leu Pro Gly  
 100 105 110  
 Asn Asn Thr Leu Cys Glu Pro Val Val Glu Pro Gly Thr Ala Trp Ala  
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 130 135 140  
 Arg Asp  
 145

<210> 3283  
 <211> 3268  
 <212> DNA  
 <213> Homo sapiens

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cggggctgga tggcacgcag gcacttccag cggctgcggg atgcagccat tgtcatccag  
240  
tgtgccttcc ggatgctcaa ggccaggcgg gagctgaagg ccctcaggat tgaggcccg  
300  
tcagcagagc atctgaaacg tctcaacgtg ggcatggaga acaaggtggt ccagctgcag  
360  
cggaagatcg atgagcagaa caaagagttc aagacacttt cagagcagtt gtccgtgacc  
420  
acctcaacat acaccatgga ggtagagcgg ctgaagaagg agctggtgca ctaccagcag  
480  
agcccagggtg aggacaccag cctcaggctg caggaggagg tggagagcct gcgcacagag  
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gagctgagga agcgagttgc agacctggag caagaaaatg ctctcttgaa agatgagaaa  
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720  
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900  
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1620  
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1680



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1920  
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1980  
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2580  
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2640  
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2940  
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3268

&lt;210&gt; 3284

&lt;211&gt; 1012

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3284

```

Xaa Ile Arg Ala Ala Val Val Leu Gln Lys His Tyr Arg Met Gln Arg
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Ala Arg Gln Ala Tyr Gln Arg Val Arg Arg Ala Ala Val Val Ile Gln
          20           25           30
Ala Phe Thr Arg Xaa His Val Cys Ala Glu Asn Leu Pro Pro Val Leu
          35           40           45
Met Glu His Lys Ala Thr Thr Ile Gln Lys His Val Arg Gly Trp Met
          50           55           60
Ala Arg Arg His Phe Gln Arg Leu Arg Asp Ala Ala Ile Val Ile Gln
65           70           75           80
Cys Ala Phe Arg Met Leu Lys Ala Arg Arg Glu Leu Lys Ala Leu Arg
          85           90           95
Ile Glu Ala Arg Ser Ala Glu His Leu Lys Arg Leu Asn Val Gly Met
          100          105          110
Glu Asn Lys Val Val Gln Leu Gln Arg Lys Ile Asp Glu Gln Asn Lys
          115          120          125
Glu Phe Lys Thr Leu Ser Glu Gln Leu Ser Val Thr Thr Ser Thr Tyr
          130          135          140
Thr Met Glu Val Glu Arg Leu Lys Lys Glu Leu Val His Tyr Gln Gln
145          150          155          160
Ser Pro Gly Glu Asp Thr Ser Leu Arg Leu Gln Glu Glu Val Glu Ser
          165          170          175
Leu Arg Thr Glu Leu Gln Arg Ala His Ser Glu Arg Lys Ile Leu Glu
          180          185          190
Asp Ala His Ser Arg Glu Lys Asp Glu Leu Arg Lys Arg Val Ala Asp
          195          200          205
Leu Glu Gln Glu Asn Ala Leu Leu Lys Asp Glu Lys Glu Gln Leu Asn
          210          215          220
Asn Gln Ile Leu Cys Gln Ser Lys Asp Glu Phe Ala Gln Asn Ser Val
225          230          235          240
Lys Glu Asn Leu Leu Met Lys Lys Glu Leu Glu Glu Glu Arg Ser Arg
          245          250          255
Tyr Gln Asn Leu Val Lys Glu Tyr Ser Gln Leu Glu Gln Arg Tyr Asp
          260          265          270
Asn Leu Arg Asp Glu Met Thr Ile Ile Lys Gln Thr Pro Gly His Arg
          275          280          285
Arg Asn Pro Ser Asn Gln Ser Ser Leu Glu Ser Asp Ser Asn Tyr Pro
          290          295          300
Ser Ile Ser Thr Ser Glu Ile Gly Asp Thr Glu Asp Ala Leu Gln Gln
305          310          315          320
Val Glu Glu Ile Gly Leu Glu Lys Ala Ala Met Asp Met Thr Val Phe
          325          330          335
Leu Lys Leu Gln Lys Arg Val Arg Glu Leu Glu Gln Glu Arg Lys Lys
          340          345          350
Leu Gln Val Gln Leu Glu Lys Arg Glu Gln Gln Asp Ser Lys Lys Val
          355          360          365
Gln Ala Glu Pro Pro Gln Thr Asp Ile Asp Leu Asp Pro Asn Ala Asp

```

370		375		380
Leu Ala Tyr Asn Ser	Leu Lys Arg Gln Glu	Leu Glu Ser Glu Asn Lys		
385	390	395	400	
Lys Leu Lys Asn Asp	Leu Asn Glu Leu Arg Lys	Ala Val Ala Asp Gln		
	405	410	415	
Ala Thr Gln Asn Asn Ser Ser His Gly	Ser Pro Asp Ser Tyr Ser Leu			
	420	425	430	
Leu Leu Asn Gln Leu Lys Leu Ala His Glu Glu	Leu Glu Val Arg Lys			
	435	440	445	
Glu Glu Val Leu Ile Leu Arg Thr Gln Ile Val	Ser Ala Asp Gln Arg			
	450	455	460	
Arg Leu Ala Gly Arg Asn Ala Glu Pro Asn Ile Asn Ala Arg Ser Ser				
465	470	475	480	
Trp Pro Asn Ser Glu Arg His Val Asp Gln Glu Asp Ala Ile Glu Ala				
	485	490	495	
Tyr His Gly Val Cys Gln Thr Asn Arg Leu Leu Glu Ala Gln Leu Gln				
	500	505	510	
Ala Gln Ser Leu Glu His Glu Glu Glu Val Glu His Leu Lys Ala Gln				
	515	520	525	
Leu Glu Ala Leu Lys Glu Glu Met Asp Lys Gln Gln Gln Thr Phe Cys				
	530	535	540	
Gln Thr Leu Leu Leu Ser Pro Glu Ala Gln Val Glu Phe Gly Val Gln				
545	550	555	560	
Gln Glu Ile Ser Arg Leu Thr Asn Glu Asn Leu Asp Leu Lys Glu Leu				
	565	570	575	
Val Glu Lys Leu Glu Lys Asn Glu Arg Lys Leu Lys Lys Gln Leu Lys				
	580	585	590	
Ile Tyr Met Lys Lys Ala Gln Asp Leu Glu Ala Ala Gln Ala Leu Ala				
	595	600	605	
Gln Ser Glu Arg Lys Arg His Glu Leu Asn Arg Gln Val Thr Val Gln				
	610	615	620	
Arg Lys Glu Lys Asp Phe Gln Gly Met Leu Glu Tyr His Lys Glu Asp				
625	630	635	640	
Glu Ala Leu Leu Ile Arg Asn Leu Val Thr Asp Leu Lys Pro Gln Met				
	645	650	655	
Leu Ser Gly Thr Val Pro Cys Leu Pro Ala Tyr Ile Leu Tyr Met Cys				
	660	665	670	
Ile Arg His Ala Asp Tyr Thr Asn Asp Asp Leu Lys Val His Ser Leu				
	675	680	685	
Leu Thr Ser Thr Ile Asn Gly Ile Lys Lys Val Leu Lys Lys His Asn				
	690	695	700	
Asp Asp Phe Glu Met Thr Ser Phe Trp Leu Ser Asn Thr Cys Arg Leu				
705	710	715	720	
Leu His Cys Leu Lys Gln Tyr Ser Gly Asp Glu Gly Phe Met Thr Gln				
	725	730	735	
Asn Thr Ala Lys Gln Asn Glu His Cys Leu Lys Asn Phe Asp Leu Thr				
	740	745	750	
Glu Tyr Arg Gln Val Leu Ser Asp Leu Ser Ile Gln Ile Tyr Gln Gln				
	755	760	765	
Leu Ile Lys Ile Ala Glu Gly Val Leu Gln Pro Met Ile Val Ser Ala				
	770	775	780	
Met Leu Glu Asn Glu Ser Ile Gln Gly Leu Ser Gly Val Lys Pro Thr				
785	790	795	800	
Gly Tyr Arg Lys Arg Ser Ser Ser Met Ala Asp Gly Asp Asn Ser Tyr				

805 810 815  
 Cys Leu Glu Ala Ile Ile Arg Gln Met Asn Ala Phe His Thr Val Met  
 820 825 830  
 Cys Asp Gln Gly Leu Asp Pro Glu Ile Ile Leu Gln Val Phe Lys Gln  
 835 840 845  
 Leu Phe Tyr Met Ile Asn Ala Val Thr Leu Asn Asn Leu Leu Leu Arg  
 850 855 860  
 Lys Asp Val Cys Ser Trp Ser Thr Gly Met Gln Leu Arg Tyr Asn Ile  
 865 870 875 880  
 Ser Gln Leu Glu Glu Trp Leu Arg Gly Arg Asn Leu His Gln Ser Gly  
 885 890 895  
 Ala Val Gln Thr Met Glu Pro Leu Ile Gln Ala Ala Gln Leu Leu Gln  
 900 905 910  
 Leu Lys Lys Lys Thr Gln Glu Asp Ala Glu Ala Ile Cys Ser Leu Cys  
 915 920 925  
 Thr Ser Leu Ser Thr Gln Gln Ile Val Lys Ile Leu Asn Leu Tyr Thr  
 930 935 940  
 Pro Leu Asn Glu Phe Glu Glu Arg Val Thr Val Ala Phe Ile Arg Thr  
 945 950 955 960  
 Ile Gln Ala Gln Leu Gln Glu Arg Asn Asp Pro Gln Gln Leu Leu Leu  
 965 970 975  
 Asp Ala Lys His Met Phe Pro Val Leu Phe Pro Phe Asn Pro Ser Ser  
 980 985 990  
 Leu Thr Met Asp Ser Ile His Ile Pro Ala Cys Leu Asn Leu Glu Phe  
 995 1000 1005  
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 1010

&lt;210&gt; 3285

&lt;211&gt; 1518

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3285

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 120  
 ggtttcacca ctgcctcctt tggcaacttg agtgggtggtg ttcccaccga gtttatggct  
 180  
 gcaaagatag gtctttttctc gtatttatgt ataaacaggt accagttttg attttattta  
 240  
 atcatttcat acattaacat acatgacaca tcaaaatgag aaatgcacag ttttaaccgtt  
 300  
 caacagctgg cettacttca aaagaacact atattcatat taaacattta cagtctttcc  
 360  
 atctaacttt acacatgtcc taaatcattt tccagcactt ctacataga agtctagttt  
 420  
 tgctctttta aatcaccatc tgtatcacc ctagtagacg cgagggtttc cccaattaca  
 480  
 tgctgaagag agccagccac caccacacct aaagacatcc aagcagctcc agagcctgcc  
 540  
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tgaaccagca ctaaaggctg taggatgtga ctacatcaca gttccagaag gaaggggacc  
 660  
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 aaaaacctga gatacgaggc agcaactagc gacacttaca ggaagggaaa gaacaatgac  
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 1500  
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&lt;210&gt; 3286

&lt;211&gt; 142

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3286

Met	Lys	Ser	His	Pro	Gly	Gln	Lys	Thr	Val	His	Phe	Ser	Lys	Thr	Glu
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Lys	Asn	Leu	Arg	Tyr	Glu	Ala	Ala	Thr	Ser	Asp	Thr	Tyr	Arg	Lys	Gly
			20					25					30		
Lys	Asn	Asn	Asp	Asn	Thr	Arg	Pro	Ala	Pro	Pro	Pro	Lys	Ser	Cys	Cys
			35				40					45			
Cys	Glu	Leu	Arg	Leu	Gln	Lys	Arg	Thr	His	Thr	Val	Ala	Asp	Lys	Thr
			50			55					60				
Gln	Ala	Arg	Arg	Met	Phe	Glu	Ser	Gln	Ser	Ala	Leu	Ser	Leu	Val	Pro
65					70					75				80	
Val	Thr	Ser	Tyr	Val	Gln	Leu	Pro	Gly	Pro	Ile	Pro	Tyr	Ser	Asp	Cys
			85				90						95		
Arg	Leu	Arg	Thr	Glu	Asp	Ala	Pro	Leu	Leu	Ser	Leu	His	Phe	Asp	Leu
			100				105					110			
Leu	Phe	Pro	Leu	Lys	Thr	Arg	Arg	Pro	Ala	Phe	Pro	Lys	Thr	Ala	Trp

	115		120		125								
Pro	Trp	Leu	Cys	Thr	Leu	Phe	Thr	Thr	Asp	Gln	Asn	Ser	Ile
	130					135					140		

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 <211> 921  
 <212> DNA  
 <213> Homo sapiens

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 180  
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 360  
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 tacttggaga ggccgaagct gaagctacag gactgagggg ctggaaaggg cgcgggagag  
 480  
 acaattccga ccctccccag agccctgac ttccttctcc ggacgctgtc ctccctggaa  
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 660  
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 720  
 ctgggtgccc tagacctggc ctctctctc cctgcgctgc agaccaacgc ggccggaaaa  
 780  
 aggctggagg gggcttggca gccaaagctaa ttcgggcgaa tttctatgat tatgattttt  
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 ttattaaata gttataaaaa aataggggat acaatttaaa ggactccttag tttaaaacaa  
 900  
 aatctattct gagaactctt c  
 921

<210> 3288  
 <211> 148  
 <212> PRT  
 <213> Homo sapiens

<400> 3288  
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 20 25 30  
 Ser Cys Ser Phe Ser Phe Gly Leu Ser Lys Tyr Pro Gly Pro Pro Cys

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      35              40              45
Ile Pro Leu Pro Phe Ser Cys Gly Cys Gly Ala Ser Leu Asn Arg Ser
      50              55              60
Thr Phe Leu Phe Pro Ser Thr Arg Asp Arg Glu Ser Leu Lys Gly Ser
65              70              75              80
Gly Ala Pro Ser Ala His Leu Asp Gly Ala Gly Asp Ala Gln Arg Arg
      85              90              95
Phe Arg Ala Leu Tyr Phe Gln Leu Gln His Ser Gln Val Phe Thr Ala
      100             105             110
Gln Gly Asp Gly Ala Arg Val Thr Arg Asn Pro Gly Glu Gly Arg Ser
      115             120             125
Phe Pro Arg Arg Gly Ala Thr Ser Phe Pro Asp Trp Ala Tyr Ala Gly
      130             135             140
Gly Arg Gln Leu
145

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<210> 3289  
 <211> 554  
 <212> DNA  
 <213> Homo sapiens

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<400> 3289
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cacagcatgg actcttcctt gtgtcccggt cctgccttcg cctcctccca gctcttctct
120
cccagcctcc tagcccaata tcagggccgg aggcactgga gaacttcgg ctaaggcagg
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cctccctcc cattcacaga gccctgccag ggtggctggc aatggggaag tccagggcag
240
agatggggac agaggggacg ccttggtatc gactctgtgg tgggtggacc acctcctga
300
gaccaggcat ccacgtcggg cagcacatgc taccagtc acagaagagg aaacagaggc
360
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420
gccaagcaca tcacccagc ccttggggag caggagccgg gccttgagg gtgaggagct
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540
ataagctgca attg
554

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<210> 3290  
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 <212> PRT  
 <213> Homo sapiens

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Pro Cys Lys Ala Arg Leu Leu Leu Pro Lys Gly Trp Gly Asp Val Leu
      20              25              30
Gly Ser Leu Thr Gln Cys Arg Arg Ala Trp Val Pro Pro Trp Thr Gln

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[illegible]

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<210> 3291
<211> 1075
<212> DNA
<213> Homo sapiens
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120
tgggccccctt ctcccgccac gcctgcggtg aggctccccg ccccgctctcc taccatagct
180
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<211> 102

<212> PRT

<213> Homo sapiens

<400> 3292

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<211> 2362

<212> DNA

<213> Homo sapiens

<400> 3293

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<210> 3294

<211> 353

<212> PRT

<213> Homo sapiens

<400> 3294

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Thr	Ser	Leu	Pro	Pro	Gly	Pro	Pro	Ala	Gly	Arg	Arg	His	Leu	Pro	Leu
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Ser	Arg	Arg	Arg	Arg	Glu	Met	Ser	Ser	Asn	Lys	Glu	Gln	Arg	Ser	Ala
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Val	Phe	Val	Ile	Leu	Phe	Ala	Leu	Ile	Thr	Ile	Leu	Ile	Leu	Tyr	Ser
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 Pro Arg His Met Gly Pro Ala Leu Arg Ser Leu Gln Val Lys Lys Gly  
 35 40 45  
 Thr Glu His Ala Asp Pro Leu Pro Phe Pro Ser Val Ser Leu Ser Gly  
 50 55 60  
 Phe Thr Val Gly Thr Leu Ser Glu Thr Ser Thr Gly Gly Pro Ala Thr  
 65 70 75 80  
 Pro Thr Trp Lys Glu Cys Pro Ile Cys Lys Glu Arg Phe Pro Ala Glu  
 85 90 95  
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115

120

&lt;210&gt; 3297

&lt;211&gt; 3176

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3297

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<210> 3298

<211> 251

<212> PRT

<213> Homo sapiens

<400> 3298

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Cys	Leu	Trp	Val	Ser	Phe	Cys	Val	Cys	Val	Cys	Ile	Cys	Val	Cys	Val	35	40	45	
Xaa	Leu	Cys	Ala	Cys	Met	Cys	Leu	Asp	Val	Cys	Phe	Cys	Met	Cys	Leu	50	55	60	
Cys	Val	Cys	Leu	Tyr	Val	Cys	Ile	Cys	Val	Tyr	Val	Cys	Val	Cys	His	65	70	75	80
Phe	Val	Cys	Phe	Trp	Val	Cys	Leu	Ser	Ala	Cys	Leu	Cys	Ile	Pro	Val	85	90	95	
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Leu	Lys	Glu	Cys	Phe	Phe	Phe	Pro	Phe	Val	Ile	Glu	Arg	Ala	Gln	Pro	195	200	205	
Cys	Val	His	Trp	Leu	Thr	Val	Thr	Asn	Leu	Arg	Val	Gly	Asp	Ser	His	210	215	220	
Arg	Glu	Glu	Thr	Glu	Gly	Thr	Ala	Asp	Ser	Glu	Gln	Glu	Ser	Gly	Gly	225	230	235	240
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<211> 1387

<212> DNA

<213> Homo sapiens

<400> 3299

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&lt;210&gt; 3300

&lt;211&gt; 219

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3300

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Lys	Arg	Lys	Glu	Asn	Ser	Thr	Phe	Phe	Asp	Lys	Lys	Lys	Gln	Gln	Phe				
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Cys	Trp	His	Val	Lys	Leu	Gln	Phe	Pro	Gln	Ser	Gln	Ala	Glu	Tyr	Ile				
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Glu	Lys	Arg	Val	Pro	Asp	Lys	Thr	Ile	Asn	Glu	Ile	Leu	Lys	Pro					
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Ala	Tyr	Ile	Arg	Ser	Gln	Thr	Gly	Val	Gln	Ile	Leu	Met	Lys	Ile	Glu				
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Tyr	Met	Gln	Gln	Asn	Leu	Val	Arg	Tyr	Tyr	Glu	Leu	Asp	Pro	Tyr	Lys				
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&lt;210&gt; 3301

&lt;211&gt; 2109

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3301

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&lt;210&gt; 3302

&lt;211&gt; 323

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3302

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Arg Asp Gly Glu Gly Pro Val Arg Glu Ala Thr Val Lys Pro Phe Ala
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Ile Asp Ile Phe Pro Val Thr Asn Lys Asp Phe Arg Asp Phe Val Arg
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Glu Lys Lys Tyr Arg Thr Glu Ala Glu Met Phe Gly Trp Ser Phe Val
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Pro Tyr Gln Ala Ala Glu Gln Asp Met Arg Val Leu Arg Gly His Pro
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          195          200          205
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His Val Ala Asn Ser Ala Ile Pro Ser Ser Arg Ala Ser Ala Ser Gly
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Lys Asn Phe Pro Phe Pro Val Ser His Pro Ser Val Ala Gly Ala Ser
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His Gln Gly Arg Arg Gly Leu Ser Leu Leu Cys Phe Gly Glu Gly Ala
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&lt;211&gt; 699

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3303

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<212> PRT

<213> Homo sapiens

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Asp	Arg	Arg	Ser	Thr	Glu	Pro	Ser	Val	Thr	Pro	Asp	Leu	Leu	Asn	Phe
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His	Trp	Phe	Val	Leu	Ala	Asp	Gln	Ser	Leu	Arg	Tyr	Tyr	Arg	Asp	Ser
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Cys	Tyr	Asp	Val	Thr	Glu	Tyr	Pro	Val	Gln	Arg	Asn	Tyr	Gly	Phe	Gln
			100					105					110		
Ile	His	Thr	Lys	Glu	Gly	Glu	Phe	Thr	Leu	Ser	Ala	Met	Thr	Ser	Gly
			115				120					125			
Ile	Arg	Arg	Asn	Trp	Ile	Gln	Thr	Ile	Met	Lys	His	Val	His	Pro	Thr
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Thr	Ala	Pro	Asp	Val	Thr	Ser	Ser	Leu	Pro	Glu	Glu	Lys	Asn	Lys	Ser
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						195					200					205				
Pro	Ile	Gln	Gln	Ala	Leu	Ala	Gln	Glu	Arg	Val	Gly	Gly	Val	Gly	Pro					
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<400> 3306

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Ile	Ser	Leu	Val	Met	Lys	Thr	Pro	Arg	Val	Ala	Lys	Asn	Glu	Ala	Leu
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Leu	Asn	Ile	Gln	Ala	Ser	Pro	Lys	Val	Arg	Leu	Ser	Leu	Ala	Asn	Glu
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Ala	Leu	Leu	Pro	Thr	Leu	Ile	Cys	Asp	Ile	Ala	Gly	Tyr	Tyr	Pro	Leu
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Asp	Val	Val	Val	Thr	Trp	Thr	Arg	Glu	Glu	Leu	Gly	Gly	Ser	Pro	Ala
	210					215					220				
Gln	Val	Ser	Gly	Ala	Ser	Phe	Ser	Ser	Leu	Arg	Gln	Ser	Val	Ala	Gly
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Thr	Tyr	Ser	Ile	Ser	Ser	Ser	Leu	Thr	Ala	Glu	Pro	Gly	Leu	Cys	Arg
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Cys	His	Leu	His	Leu	Pro	Gly	His	Thr	His	Leu	Ser	Gly	Gly	Ala	Pro
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Trp	Gly	Gln	His	Pro	Gly	Cys	Pro	Thr	Arg	Ala	Glu	Asn	Ser	Leu	Gly
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Ser	His	Leu	Cys	Gln	Gln	Ser	Leu	Pro	Ser	Cys	Thr	Asp	Val	Pro	Gly
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 35 40 45  
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 <212> PRT  
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 Ala Gln Leu Glu Glu Gln Phe Tyr Leu Gln Ala Leu Lys Leu Pro Asn  
 35 40 45  
 Gln Thr His Pro Asp Val Pro Val Gly Asp Glu Ser Gln Ala Arg Val  
 50 55 60  
 Leu His Met Val Gly Asp Lys Pro Val Phe Ser Phe Gln Pro Arg Gly  
 65 70 75 80  
 His Leu Glu Ile Gly Glu Lys Leu Asp Ile Ile Arg Gln Lys Arg Leu  
 85 90 95  
 Ser His Val Ser Gly His Arg Ser Tyr Tyr Leu Arg Gly Ala Gly Ala  
 100 105 110  
 Leu Leu Gln His Gly Leu Val Asn Phe Thr Phe Asn Lys Leu Leu Arg  
 115 120 125  
 Arg Gly Phe Thr Pro Met Thr Val Pro Asp Leu Leu Arg Gly Ala Val  
 130 135 140  
 Phe Glu Gly Cys Gly Met Thr Pro Asn Ala Asn Pro Ser Gln Ile Tyr  
 145 150 155 160  
 Asn Ile Asp Pro Ala Arg Phe Lys Asp Leu Asn Leu Ala Gly Thr Ala  
 165 170 175  
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 <211> 486  
 <212> DNA  
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<211> 102

<212> PRT

<213> Homo sapiens

<400> 3312

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			20					25					30		
Phe	Tyr	Glu	Asp	Cys	Thr	Ala	Ser	Ile	Trp	Glu	Tyr	Glu	Asp	Asp	Phe
			35				40					45			
Gln	Ile	Gln	Arg	Ser	Pro	Asn	Arg	Trp	Ser	Ser	Val	Phe	Trp	Lys	Val
			50			55					60				
Gly	Leu	Ile	Ser	Gly	Thr	Val	Phe	Val	Ile	Leu	Gly	Leu	Thr	Val	Leu
65					70					75				80	
Ala	Val	Gly	Phe	Leu	Val	Pro	Pro	Lys	Ile	Glu	Ala	Phe	Gly	Glu	Ala
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<212> DNA

<213> Homo sapiens

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